

# Purchase Order Receipt Listing

Thursday, July 26, 2012 8:56:04 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO17463 Receipt Dates from 7/26/2012 to 7/26/2012 All Line Item Types  
All Item ID/GL/WOs All Rec. Employees All Currencies  
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
<b>VendorID/Vendor Name VC-COP001 Thyssenkrupp Materials CA Ltd</b>											
PO17463	3		M303B1.000X1.000 f		7/25/2012	7/26/2012	12.7000	\$13.49	0.0000	0	\$171.36
CAD	No		303 BAR 1" X 1" f		12.0000	DESJ02		\$171.36	0.0000	0	
			122521								
	6		M304S11GA sf		7/23/2012	7/26/2012	280.0000	\$8.85	0.0000	0	\$2,478.17
	No		304/316 0.125 Sheet sf		280.0000	DESJ02		\$2,478.17	0.0000	0	
			122521								
	7		M6061T6B0.500X01. f		7/23/2012	7/26/2012	24.0000	\$1.55	0.0000	0	\$37.09
	No		6061-T6 Bar .500 x f		24.0000	DESJ02		\$37.09	0.0000	0	
			1.25								
			122521								
	8		M6061T6B0.500X06. f		7/23/2012	7/26/2012	24.0000	\$7.03	0.0000	0	\$168.78
	No		000		24.0000	DESJ02		\$168.78	0.0000	0	
			6061-T6 Bar .500 x f								
			6.00								
			122521								
	9		M6061T6B0.750X01. f		7/23/2012	7/26/2012	24.0000	\$2.62	0.0000	0	\$62.80
	No		500		24.0000	DESJ02		\$62.80	0.0000	0	
			6061-T6 Bar .750 X f								
			1.50								
			122521								
	10		M6061T6B1.000X04. f		7/23/2012	7/26/2012	24.0000	\$9.24	0.0000	0	\$221.77
	No		000		24.0000	DESJ02		\$221.77	0.0000	0	
			6061-T6 Bar 1.00 x f								
			4.00								
			122521								
	11		M6061T6B1.250X01. f		7/23/2012	7/26/2012	12.0000	\$3.60	0.0000	0	\$43.18
	No		250		12.0000	DESJ02		\$43.18	0.0000	0	
			6061-T6 Bar 1.25 x f								
			1.25								
			122521								

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Sid	PO U/M/ Stock U/M	Required Date Required Qty	Recv Date/ Recv Lump	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID/Vendor Name			VC-COP001 Thyssenkrupp Materials CA Ltd								
PO17463	12		M6061T6B1.500X02. f 000		7/23/2012	7/26/2012	12.0000	\$6.87	0.0000	0	\$82.43
CAD	No		6061-T6 Bar 1.50 x f 2.00 122521		12.0000	DESJ02		\$82.43	0.0000	0	
	13		M6061T6B2.000X02. f 250		7/23/2012	7/26/2012	12.0000	\$11.61	0.0000	0	\$139.34
	No		6061-T6 Bar 2.00 x f 2.25 122521		12.0000	DESJ02		\$139.34	0.0000	0	
	14		M6061T6R1.000 f		7/23/2012	7/26/2012	24.0000	\$1.80	0.0000	0	\$43.18
	No		ROUND BAR 1.00" f 122521		24.0000	DESJ02		\$43.18	0.0000	0	
	15		M6061T6R3.500 f		7/23/2012	7/26/2012	12.0000	\$23.06	0.0000	0	\$276.73
	No		6061 RD bar 3.50 f 122521		12.0000	DESJ02		\$276.73	0.0000	0	
	17		M6061T6S.080 sf		7/23/2012	7/26/2012	96.0000	\$3.05	0.0000	0	\$292.43
	No		6061-T6 .080 Sheet sf 122521		96.0000	DESJ02		\$292.43	0.0000	0	
	18		M6061T6S.125 sf		7/23/2012	7/26/2012	64.0000	\$4.75	0.0000	0	\$304.20
	No		6061-T6 .125 Sheet sf 122521		64.0000	DESJ02		\$304.20	0.0000	0	
Total Received Quantity:											620.7000
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$4,321.47
Total Balance Due Quantity:											0.0000

## Receiving Report

Date: 12/7/26  
 Supplier: THYSON

Batch No: M12251  
 Dart P/O: 17463

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☐ No ☒  
 Shipment Complete: Yes ☒ No ☐ N/A ☐  
 QC6 Inspection: 14 12/07/27 N/A ☐  
 Work Order: 9-83 N/A ☒

### Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
M304B0.5W X 2000		24	0	0	24	
M24B 0620 X 340		12	0	0	12	
M6061T65032		96	0	0	96	
M7075+332000x3		256	0	0	6	

Initials of receiver (if shipment OK) Level 12 le

Production/Admin: 12/1/26  
 Date: 12/1/26  
 Received/Costing: 12/1/26  
 Initial: 12/1/26

Location \_\_\_\_\_

## B I L L O F L A D I N G

No: PEC 777693

Ship From:  
THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW  
Probill  
Via VIM TRANSFER  
FOB CONCORD  
Frt PREPAID  
Route 0- 0 Manifest  
Vhcle Trailer  
Slp STAN IVERS (905-532-1350)  
Sold To: ( 20115)  
DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

Ship To: ( 1)  
DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7  
Tel: 613-632-9577 Fax: 613-632-1053

## B I L L O F L A D I N G

1) Our Order PEC-472083- 1 Your PO # 17463  
STAINLESS STEEL SQ BAR 303 STAINLESS  
1.00" X 151.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
245298	88401	12 ' 7.0000 "	1		43

2) Our Order PEC-472083- 2 Your PO # 17463  
STAINLESS STEEL SHEET 304-2B  
.1200 Nom X 48.0000" X 120.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
SF29688	88728	280.00 SFT	7		1347

3) Our Order PEC-472083- 3 Your PO # 17463  
ALUMINUM FLAT BAR 6061-T6511  
.50" x 1.250" X 144.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
Z00248009	88402	24 FT	2		17

4) Our Order PEC-472083- 4 Your PO # 17463  
ALUMINUM FLAT BAR 6061-T6511  
.50" X 6.00" X 144.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
201210006	88403	24 FT	2		84

5) Our Order PEC-472083- 5 Your PO # 17463  
ALUMINUM FLAT BAR 6061-T6511  
.750" X 1.50" X 144.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
HK079 712	88404	24 FT	2		32

Page: 1 ....Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.  
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

25 JUL 2012

## B I L L O F L A D I N G

No: PEC 777693

Ship From:  
THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW  
Probill  
Via VIM TRANSFER  
FOB CONCORD  
Frt PREPAID  
Route 0- 0 Manifest  
Vhcle Trailer  
Slp STAN IVERS (905-532-1350)  
Sold To: ( 20115)  
DART AEROSPACE

Ship To: ( 1)  
DART AEROSPACE

## B I L L O F L A D I N G

6) Our Order PEC-472083- 6 Your PO # 17463

ALUMINUM FLAT BAR 6061-T6511

1.00" x 4.00" X 144.0000"

Heat Number  
201210303

Tag No  
88405

Quantity  
24 FT

PCS  
2

MTR

Wt LBS  
114

7) Our Order PEC-472083- 7 Your PO # 17463

ALUMINUM SQUARE BAR 6061-T6511

1.250" X 144.0000"

Heat Number  
Z00240017

Tag No  
88406

Quantity  
12 FT

PCS  
1

MTR

Wt LBS  
23

8) Our Order PEC-472083- 8 Your PO # 17463

ALUMINUM FLAT BAR 6061-T6511

1.50" x 2.00" X 144.0000"

Heat Number  
201209117

Tag No  
88407

Quantity  
12 FT

PCS  
1

MTR

Wt LBS  
43

9) Our Order PEC-472083- 9 Your PO # 17463

Part # OFFERING\*\*\*\*\*

Rel #

ALUMINUM FLAT BAR 6061-T6511

2.00" x 2.50" X 144.0000"

Heat Number  
C7331164

Tag No  
88408

Quantity  
12 FT

PCS  
1

MTR

Wt LBS  
71

10) Our Order PEC-472083- 10 Your PO # 17463

ALUMINUM ROUND BAR 6061-T6511

1.00" DIA X 144.0000"

Heat Number  
Z00216020

Tag No  
88409

Quantity  
24 FT

PCS  
2

MTR

Wt LBS  
23

11) Our Order PEC-472083- 11 Your PO # 17463

ALUMINUM ROUND BAR 6061-T6511

3.50" DIA X 144.0000"

12/2/12  
MTR

Page: 2 ....Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
RAPPORTÉES IMMÉDIATEMENT.

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RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.  
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

25 JUL. 2012

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

TVQ/QST# 1017327981 TQ001 TPS/GST TVH/HST # 140223934 RT0001

## B I L L O F L A D I N G

No: PEC 777693

Ship From:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW  
 Probill  
 Via VIM TRANSFER  
 FOB CONCORD  
 Frt PREPAID  
 Route 0- 0 Manifest  
 Vhcle Trailer  
 Slp STAN IVERS (905-532-1350)  
 Sold To: ( 20115)  
 DART AEROSPACE

Ship To: ( 1)  
 DART AEROSPACE

## B I L L O F L A D I N G

Heat Number	Tag No	Quantity	PCS	Wt LBS
21112151	88410	12 FT	1	140

12) Our Order PEC-472083- 12 Your PO # 17463  
 ALUMINUM SHEET 6061 T6

.0810 Nom X 48.0000" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
25872/01/00	88035	96.00 SFT	2	105

MTR

13) Our Order PEC-472083- 13 Your PO # 17463

ALUMINUM SHEET 6061 T6

.1250 Nom X 48.0000" X 96.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
30286/01/00	88036	64.00 SFT	-2	109

MTR

14) Our Order PEC-472083- 14 Your PO # 17463

Part # PLATE ASTM B 209 QQ-A-250/12 Rel #

ALUMINUM PLATE 7075T7351

2.50" THICK X 3.2500" X 72.0000"

\*\*\* BACK ORDER \*\*\*

TOTAL:	Tags	PCS	LBS
	13	26	2151

Heat Number  
 201209117  
 201210006  
 201210303  
 21112151  
 245298  
 25872/01/00  
 30286/01/00  
 HK079 712  
 SF29688  
 Z00216020

\*\*\* Chemical Analysis \*\*\*

Page: 3 ....Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
 RAPPORTÉES IMMÉDIATEMENT.

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25 JUL. 2012

## B I L L O F L A D I N G

No: PEC 777693

Ship From: \*  
THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW  
Probill  
Via VIM TRANSFER  
FOB CONCORD  
Frt PREPAID  
Route 0- 0 Manifest  
Vhcle Trailer  
Slp STAN IVERS (905-532-1350)  
Sold To: ( 20115)  
DART AEROSPACE

Ship To: ( 1)  
DART AEROSPACE

## B I L L O F L A D I N G

Z00240017  
Z00248009

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*  
\*\* REFERENCED ON IT \*\*

TOTAL 1 BDL, 2 SKIDS GW. 2477 LBS

\*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA  
CONCORD, ONT.\* \*\*\* 9:00 AM TO 4:00 PM \*\*\*

\*\*\*\* TEL. 800-926-2600 \*\*\*\*

\*\*\*\*\*

\* WE STOCK STAINLESS STEEL \*

\* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*

\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
ADDED TO EVERY ORDER.\*\*\*

Page: 4 .... Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
RAPPORTÉES IMMÉDIATEMENT.

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RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.  
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER

25 JUL 2012

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL SQ BAR 303 STAINLESS

1.00" X 151.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-001

23Jul12

Signed by: \_\_\_\_\_ Pg 1/1

**Acciaierie  
Valbruna S.p.A.**



36100 VICENZA (Italia) - Viale della scienza, 25 z.i.

Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Clienti / Bortelle/Purchaser/Client

VALBRUNA CANADA LTD

8724 HOLGATE CRESCENT

CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**

Hersteller/Usine producer

Avviso di Spedizione: D-VI08000486

Lettera/Order/Packing list/L

Certificato nr: MEST576706/2008/

Fattura/Tax/Invoice

Conferma ordine nr: EI07004722

Work-Order/Ref. nr.

Marchio di Fabbrica:

Zeichen des Herstellers

Trade mark

Signe de l'usine productrice



Punzone del Collaudatore:

Stempel des Werkstoffverständigen

Inspection stamp/Prin de l'assesseur



Oggetto Prove: - Annealed Cold Drawn

Prüfungszustand/Item inspected/Prüfungszustand

Tipo di Elaborazione: E+AOD

Erzichte zugehörig/Manufacturing process/Mode d'élaboration

Specifiche:

Anforderungen / Requirements / Præzisions

VSI 0 303 A,CF

ASME SA320 2004 B8F e

ASTM A370 2007A

QQ-S-764 B/2 303 A

(0) SEC. II P.T.A 2004 EDITION ADD.2006

(1) Chemical analysis only.

AMS 5640 U S30300 A

ASTM A314 97 S30300

ASTM A582 2005 S30300 A

AMS 5640 U TYPE1 A

ASTM A320 2007A B8F (1)

MIL-S-862 B/1 303

0Chemical analysis only.

Qualità: T-303

Werkstoff/Grade/Qualität

Marca: VPAU188Z VALPLUS

Markenbezeichnung/Brand/Marka

Punzonatura: T-303

Kenntzeichnung/Marking/Markage

Pos. nr. Item nr. Nr. de pose	Oggetto Gegenstand Produit descriptif Description of product	Dimensioni - in Abmessungen Dimension Dimensions	Tolleranza Tolérance Allowance Tolerance	Lunghezza - Ft Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot n°
0060	Square	1.0000 x 1.0000	484-06B	13 / 13	245298		1.790	706701180

Sono state soddisfatte tutte le condizioni richieste

Die gezeigten Anforderungen sind 1. Anlage erfüllt

The material has been furnished in accordance with the requirements

Le matériel a été fourni conforme aux exigences

Controllo antimescolanza: OK

Vorverhinderungsmessung: Spektralanalyse durchgeführt

Antimixing testing performed: OK

Contrôle antimesclage fait: r.e.s.

Controllo visivo e dimensionale: soddisfa le esigenze

Einrichtung und Ausmessung ohne Beanstandung

Visual inspection and dimensional check satisfactory

Contrôle visuel et dimensionnel satisfaisant

TEST	Provetta/Probes Sproben/Éprouvettes Longitudinale Ripetibile Wiederholbar Long. Répétable Long. Répétable	° F	Posit. Saggio Position Position	Sneramento Zugversuch Yield Stress Rp 0,2% k.s.i.	Sneramento Zugversuch Tensile Stress Rm k.s.i.	Resistenza Zugfestigkeit Tensile Strength Rm k.s.i.	Allungamento Zugdehnung Elongation Alongment %	Strizione Zugversuch Reduction of area Striction %	Resistenza Zugversuch Impact Value Resistance	Durezza Härte Hardness Dureté HB
Valori richiesti 1 Anforderungen/Required values Valeurs demandées		min max								140 255
A	12,5	68	L	80		102	37	50		242

Grain size for ASTM E112

6

1) L=longitudinale/Longa. Q=transversale/Quer. T=angolazione/anguliert

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata/Heat Schmelze/Coulée	min - max 0,160	1,00	1,50 2,00	7,00 19,00	0,30	1,00	8,00 10,00	0,10	0,25 0,35	0,40	-	-	-	-	-
C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %					
245298	0,053	0,47	1,79	17,24	0,38	0,71	8,13	0,10	0,029	0,28	0,01				

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940° F for 1h/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy

No welding or weld repair

Material free from Mercury or radio-activity contamination

The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1, A.4.3 by TÜV SÜD and LLOYD'S

DAS  
14  
2-89  
12/07/27

Vicenza, 14/01/08 VCO008 (Mod. MCER)	Il collaudatore di stabilimento / der Werkstoffverständigen / Works inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 1
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# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511  
.50" x 1.250" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-003

23Jul12

Signed by: \_\_\_\_\_ Pg 1/2

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

*Best in Class*

### CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-236648-4		CUSTOMER PART NUMBER: ALREC00139		PRODUCT DESCRIPTION: 0.500 X 1.250 SQ COR RECT BAR	
KAISER ORDER NUMBER: 612835	LINE ITEM: 004	SHIP DATE: 02/03/2012	KAISER LOT NUMBER: Z00248009	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 494.000 LB	QUANTITY: 56.000 PCS	B/L NUMBER: 602545	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00248009	0C01	1	45.9	43.1	15.5	RE 91	N/A	N/A
Z00248009	0C01	2	47.0	44.1	16.2	RE 92	N/A	N/A
Z00248009	0C01	3	46.5	43.6	17.1	RE 94	N/A	N/A
Z00248009	0C01	4	47.1	44.5	17.1	RE 91	N/A	N/A
Z00248009	0C01	5	46.5	43.8	16.5	RE 88	N/A	N/A
Z00248009	0C01	6	46.0	43.0	17.9	RE 94	N/A	N/A
Z00248009	0C01	7	45.6	42.3	15.9	RE 93	N/A	N/A
Z00248009	0C01	8	46.2	43.3	16.1	RE 91	N/A	N/A
Z00248009	0C01	9	46.5	43.7	17.9	RE 93	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101C84	.73	.37	.29	.08	.94	.10	.08	.03	.00	.00	.00	.01	.03

### Applicable Requirements:

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also conforms to T6-not applicable to other tempers)

### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

DAS  
14 12/07/27  
2-89

Plant Serial: 00028007  
Kaiser Order Number: 612835  
Line Item: 004

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6S11  
.50" x 1.250" X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-003

23Jul12

Signed by: \_\_\_\_\_ Pg 2/2

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

*Best in Class*

### CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

#### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgment form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

*Alex Yeh*

Plant Serial: 00028007

Kaiser Order Number: 612835

Line Item: 004

Page 2 of 2

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511  
1.00" x 4.00" X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by: \_\_\_\_\_

## Certificate of Mill Test Results

BL PEC-777693-006

23Jul12  
Pg 1/1



SERVICE CENTER METALS  
5850 Quality Way  
Prince George, VA 23875

### CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152409	3

<b>BILL TO</b> ThyssenKrupp Materials NA	<b>MANIFEST NUMBER</b> 162248	<b>DIE NUMBER</b> RB0128	<b>DATE OF SHIPMENT</b> 6/19/2012	<b>CERTIFICATION</b> ASTM-B221-12 StencilContinuous
<b>SHIP TO</b> ThyssenKrupp Materials NA PEC	<b>CUSTOMER PO</b> PEC-239753	<b>ALLOY / TEMPER</b> 6061-T6511	<b>SALESPERSON</b> David Schroeder	<b>SPECIFICATION</b> AMS-QQA-200/8-07
<b>Quantity Certified</b> 1,482 lbs 26pcs	<b>CUSTOMER PART NUMBER</b> RB0128	<b>DESCRIPTION</b> SCRB 1.000x4.000		

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCA extrusions are manufactured in the USA.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

#### Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201210303	06/12/12	50.2	46.9	14.9

DAS  
14  
9-83  
12/07/27

#### Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others Each	Total	Melt Source:
0512135	6061	0.73	0.38	0.31	0.09	0.84	0.09	0.07	0.02	97.47	0.05	0.15	United States of America

Print Date: 6/19/2012

Calvin J. Wiggins, Director of Quality & Technical Services

Rev. 8/23/11 - LMS

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511  
1.50" x 2.00" X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by: \_\_\_\_\_

## Certificate of Mill Test Results

BL PEC-777693-008

23Jul12  
Pg 1/1



SERVICE CENTER METALS  
5850 Quality Way  
Prince George, VA 23875

### CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152110	12

**BILL TO**

ThyssenKrupp Materials NA

**SHIP TO**

ThyssenKrupp Materials NA PEC

Quantity Certified 1,369 lbs 32 pcs

**MANIFEST NUMBER**

161536

**CUSTOMER PO**

PEC-239616

**CUSTOMER PART NUMBER**

RB0138

**DIE NUMBER**

RB0138

**ALLOY / TEMPER**

6061-T6511

**DESCRIPTION**

SCRB 1.500x2.000

**DATE OF SHIPMENT**

6/8/2012

**SALESPERSON**

David Schroeder

**CERTIFICATION**

ASTM-B221-12 StencilContinuous

**SPECIFICATION**

AMS-QQA-200/8-07

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

#### Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
91	201209117	05/25/12	51.5	49.2	14.9
92	201209117	05/25/12	49.9	46.8	15.1
93	201209117	05/25/12	49.2	46.4	15.6
94	201209117	05/25/12	49.1	46.0	16.8
95	201209117	05/25/12	49.3	46.7	15.2
96	201209117	05/25/12	49.3	45.9	15.3

22/6/12  
14  
8-89

#### Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others Each	Total	Melt Source:
031424	6061	0.77	0.38	0.35	0.11	0.91	0.09	0.06	0.02	97.31	0.05	0.15	United States of America
032224	6061	0.72	0.38	0.30	0.09	0.86	0.09	0.06	0.02	97.48	0.05	0.15	
032725	6061	0.74	0.36	0.32	0.10	0.84	0.09	0.08	0.02	97.45	0.05	0.15	

Calvin J. Wiggins

Print Date: 6/8/2012

Calvin J. Wiggins, Director of Quality & Technical Services

Rev. 9/23/11 - LMS

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511

1.00" DIA X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-010

23Jul12

Signed by: \_\_\_\_\_ Pg 1/2

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

### CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:	
PEC-239097-5		015246-2		KAISERSELECT PRECISION ROD 1.000+/-0.004	
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:		KAISER LOT NUMBER:	ALLOY:
620138	005	05/11/2012		Z00216020	6061
WEIGHT SHIPPED:		QUANTITY:		TEMPER:	
2922.000 LB		264.000 PCS		T6511B	
SHIP TO:		B/L NUMBER:		DIAM/DAF/THKNS:	
2922.000 LB		603400		WIDTH:	
SHIP TO:		SOLD TO:		LENGTH:	
THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		12.000 FT.	

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z0021602C	0001	1	51.2	49.0	16.9	RE 94	N/A	N/A
Z0021602C	0001	2	50.9	48.6	16.3	RE 93	N/A	N/A
Z0021602C	0001	3	50.7	48.6	16.9	RE 93	N/A	N/A
Z0021602C	0001	4	50.1	47.4	15.8	RE 93	N/A	N/A
Z0021602C	0001	5	51.1	48.9	16.6	RE 94	N/A	N/A
Z0021602C	0001	6	51.6	49.3	16.4	RE 94	N/A	N/A
Z0021602C	0001	7	51.2	48.9	17.3	RE 95	N/A	N/A
Z0021602C	0002	1	49.7	47.2	17.4	RE 94	N/A	N/A
Z0021602C	0002	2	49.6	47.0	16.6	RE 95	N/A	N/A
Z0021602C	0002	3	50.1	47.9	15.7	RE 94	N/A	N/A
Z0021602C	0002	4	50.3	47.9	16.9	RE 94	N/A	N/A
Z0021602C	0002	5	49.5	47.9	16.9	RE 93	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.30	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101538	.72	.32	.28	.39	.95	.09	.05	.03	.00	.00	.00	.01	.03

### Applicable Requirements:

PER ASTM-B221-08, STENCILED ASME-SB221 1998 SECT. II PER AMS-QQ-A-200/8 UNS# A96061  
MEE'S ALL SPECIFICATION REQUIREMENTS FOR 6061-T6511/T6 ELEVATED MINIMUM MECHANICAL  
PROPERTIES AS FOLLOWS: UTS = 42.0 KSI MIN YIELD = 38.0 KSI MIN ELONGATION = 10.0% MIN

### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

DAS  
14  
2-89

12/07/27

Plant Serial: 00043535

Kaiser Order Number: 620138

Line Item: 005

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511

1.00" DIA X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-010

23Jul12

Signed by: \_\_\_\_\_

Pg 2/2

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048



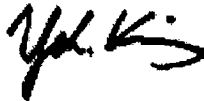
### CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

#### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager



Plant Serial: 00043535

Kaiser Order Number: 620138

Line Item: 005

Page 2 of 2

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 6061 T6  
.1250 Nom X 48.0000" X 96.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-013

23Jul12

Signed by: \_\_\_\_\_ Pg 1/2



### Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate – mill certificate

Nr.: 85283529 06 / 9

Rev. 0

Seite / page: 1 von / of 2

Datum / date: 2012 04 11

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, NADCAP

<b>Auftraggeber / customer:</b> ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD, ON	<b>Bestell Nr. / order no.:</b>	PEC-237401
	<b>Datum / date:</b>	2012 03 05
<b>Warenempfänger / consignee:</b> ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD, ON	<b>Auftragsbest. Nr. / order confirm. no.:</b>	638423
	<b>Datum / date:</b>	2012 03 06
<b>Endkunde, Bestell-Nr. / Your cust., ord. no.:</b>	<b>Lieferschein Nr. / delivery note:</b>	85283529
	<b>Datum / date:</b>	2012 04 30
	<b>Akkreditiv Nr. / letter of credit no.:</b>	

Produkt/product	Bedingungen/terms
Form / form: Sheet Werkstoff / material: 6061 Zustand / temper: T6 Dim. / dim: [inch]: 0,125x48,00x96,00 Kundenartikel-Nr / customer article no.:	Techn. Lieferbedingungen / techn. spec.: AMS-QQ-A-250/11, 08.1997 ASTM B 209 - 07 Material meets also the mech. properties of AMS 4027N, 07.2008, but not marked ANSI H35.2-2009 ASME SB 209, 2007
	Sondervorschrift / special terms:

AB-Pos. ord.-Item.	BNr/Los/Teillos Lot/No./Part	Guss Nr. cast no.	Werkstoff material	Kollo packno.	Gewicht netto weight net	Stk. pcs.
04	30286/01/00	01/0049556/2	6061.1	6384230007	4003,527 lbs	73
04	30286/01/00	01/0049556/2	6061.1	6384230008	4001,323 lbs	73

### Chemische Zusammensetzung / chemical composition: [%] Gewichtsanteile / weight proportion (OES)

Guss Nr. / cast no.	AMAG designation	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti
01/0049556/2	6061.1									
	actual	0,68	0,43	0,26	0,12	0,93	0,18	0,01	0,05	0,06

### Zugversuch / Tensile test

BNr/Los Lot/No.	Zustand temper	Richtung direction	Rm [ksi]	Rp0.2 [ksi]	A2" [%]
30286/01	T6	LT	47,4	41,0	15
30286/01	T6	LT	47,1	40,6	14
30286/01	T6	LT	47,1	40,6	14
30286/01	T6	LT	47,1	40,8	14
30286/01	T6	LT	47,0	40,3	16
30286/01	T6	LT	47,0	40,3	15
30286/01	T6	LT	47,1	40,5	15
30286/01	T6	LT	47,4	40,6	15
30286/01	T6	LT	47,9	41,0	15

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – [www.amag.at](http://www.amag.at)  
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – [www.amag.at](http://www.amag.at)

(DAS  
14 12/07/27  
9-89

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 6061 T6

.1250 Nom X 48.0000" X 96.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-013

23Jul12

Signed by: \_\_\_\_\_ Pg 2/2



### Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate – mill certificate

Zertifiziert nach / certified to ISO 9001, ISO/TS 13949, EN/AS 9100, ISO 14001, NADCAP

Nr.: 85283529 06 / 9

Rev. 0

Seite / page: 2 von / of 2

Datum / date: 2012 04 11

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.  
We hereby certify that the material described above has been tested and complies with the terms of the order  
contract.

Werkssachverständiger / factory specialist	E-Mail / e-mail
Josef Klampfer	j.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.  
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – [www.amag.at](http://www.amag.at)  
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – [www.amag.at](http://www.amag.at)



# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL SHEET 304-2B  
 .1200 Nom X 48.0000" X 120.0000"  
 PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
 furnished by the producer of the metal, or data  
 resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-002

23Jul12

Pg 1/1

Signed by: \_\_\_\_\_

DA  
14  
9-89  
12/6/27

### 产品质量证明书 MILL TEST CERTIFICATE

**DMSSC** 江苏大明金属制品有限公司  
 JIANGSU DAMING METAL PRODUCTS CO., LTD.  
 地址: 无锡市钱桥乡钱桥村  
 ADDRESS: NO. 1518, TONGJIANG ROAD WUXI ROAD  
 JIANGSU PROVINCE, CHINA  
 TEL: 5108258857

订单号: 82088  
 Order No.  
 客户: GLOBAL STAINLESS STEEL INC.  
 Order  
 收货人: \_\_\_\_\_  
 CONSIGNEE

品名: COLD ROLLED STAINLESS  
 Commodity: STEEL SHEET, SLIT EDGE

编号: M120302001  
 Invoice No.  
 发行日期: 2012-4-15  
 Date

序号 No.	Product No.	牌号 Type	表面加工 Surface Finish	产品尺寸 Product Size			重量 NET Weight KG	标准 Specification	拉伸试验 Tensile Test			硬度 Hardness HV0.05	钢号 STEEL NO.	炉号 HEAT NO.	化学成分 Chemical Composition (%)							
				厚度 Thickness MM	宽度 Width MM	长度 Length MM			屈服强度 R <sub>e</sub> (0.2) Mpa	抗拉强度 R <sub>m</sub> Mpa	延伸率 A %				C	Si	Mn	P	S	Ni	Cr	N
1	P001693080	304	2B	0.5	1219	2438	910.04	ASTM A240	275	731	65	167	QWA0130C	SF28811	0.0510	0.5090	1.0620	0.0321	0.0057	8.02	18.26	!
2	P001693081	304	2B	0.5	1219	3048	906.06	ASTM A240	275	731	65	167	QWA0130C	SF28811	0.0510	0.5060	1.0520	0.0321	0.0067	8.02	18.26	!
3	P001715073	304	2B	0.5	1219	3048	905.00	ASTM A240	270	731	60	167	QWB0401B	SF28408	0.0468	0.5120	1.0540	0.0208	0.0064	8.02	18.32	!
4	P001688219	304	2B	1.6	1219	2438	1813.74	ASTM A240	273	692	62	168	QWB0207B	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	!
5	P001683220	304	2B	1.5	1219	3048	1831.40	ASTM A240	273	692	62	168	QWB0207B	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	!
6	P001683221	304	2B	1.5	1219	3048	910.74	ASTM A240	273	692	62	168	QWB0207B	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	!
7	P001729153	304	2B	2.0	1219	3048	890.66	ASTM A240	293	706	58	173	QWZ0999A	SF28445	0.0428	0.1720	1.0360	0.0400	0.0051	8.05	18.17	!
8	P001824263	304	2B	3.0	1219	2438	1409.60	ASTM A240	201	663	61	175	QUB0403A	SF28888	0.0504	0.4510	1.1420	0.0343	0.0034	8.05	18.44	!
9	P001864295	304	2B	3.0	1219	3048	1487.64	ASTM A240	201	663	61	175	QUB0403A	SF28888	0.0504	0.4610	1.1420	0.0343	0.0034	8.05	18.44	!
10	P001705088	304	2B	2.0	1219	2438	1408.08	ASTM A240	287	714	55	174	QUC0023A	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	!
11	P001705121	304	2B	2.5	1219	3048	1353.94	ASTM A240	287	714	55	174	QUC0023A	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	!
12	P001699782	304	NO. 8	1.5	1219	2438	1890.46	ASTM A240	267	664	59	164	QWCD161B	SF30027	0.0476	0.5270	1.0650	0.0306	0.0049	8.04	18.22	!
13	P001699769	304	NO. 8	1.5	1219	3048	1976.56	ASTM A240	267	664	59	164	QWCD161B	SF30027	0.0476	0.5270	1.0650	0.0306	0.0049	8.04	18.22	!
14	P001696756	304	NO. 8	2.0	1219	2438	1983.80	ASTM A240	315	647	53	83	KA11234070A10	CS108695	0.0400	0.4500	1.0900	0.0300	0.0010	6.1	18.21	0.046
15	P001703036	304	NO. 8	2.5	1219	2438	1670.30	ASTM A240	267	714	55	174	QUC0023A	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	!
16	P001703037	304	NO. 8	2.5	1219	2438	1670.30	ASTM A240	267	714	55	174	QUC0023A	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	!

注: (Remarks)  
 1. 尺寸和重量: 合格  
 Size and Weight: OK

兹证明所列产品均符合订单和标准的相应要求

WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE IN ACCORDANCE  
 WITH THE ORDER AND SPECIFICATION  
 此证明符合订单要求

江苏大明金属制品有限公司  
 王迪强  
 JIANGSU DAMING METAL PRODUCTS CO., LTD.

技术部  
 TECHNICAL DEPT.



# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511  
 .50" X 6.00" X 144.0000"  
 PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
 furnished by the producer of the metal, or data  
 resulting from tests made in approved labs.

Signed by: \_\_\_\_\_

## Certificate of Mill Test Results

BL PEC-777693-004

23Jul12  
 Pg 1/1



SERVICE CENTER METALS  
 5850 Quality Way  
 Prince George, VA 23875

### CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152110	6

**BILL TO**

ThyssenKrupp Materials NA

**SHIP TO**

ThyssenKrupp Materials NA PEC

Quantity Certified 1,143 lbs 27 pcs

**MANIFEST NUMBER**

161978

**CUSTOMER PO**

PEC-239616

**CUSTOMER PART NUMBER**

PL0102

**DIE NUMBER**

PL0102

**ALLOY / TEMPER**

6061-T6511

**DESCRIPTION**

PL .500x6.000

**DATE OF SHIPMENT**

6/14/2012

**SALESPERSON**

David Schroeder

**CERTIFICATION**

ASTM-B221-12 StencilContinuous

**SPECIFICATION**

AMS-QQA-200/8-07

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCA extrusions are manufactured in the USA.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

#### Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201210006	06/09/12	49.1	47.0	14.5
2	201210006	06/09/12	50.8	48.5	15.0

6061  
 12/07/12  
 27

#### Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others Each	Total	Melt Source:
060421	6061	0.74	0.37	0.33	0.10	0.90	0.09	0.08	0.02	97.37	0.05	0.15	United States of America

*Calvin J. Wiggins*

Print Date: 6/14/2012

Calvin J. Wiggins, Director of Quality & Technical Services

Rev. 0/23/11 - JMS

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SQUARE BAR 6061-T6511  
1.250" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-007

23Jul12

Signed by: \_\_\_\_\_

Pg 1/2

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

*Best in Class*

### CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-240344-2		CUSTOMER PART NUMBER: ALSQ00100		PRODUCT DESCRIPTION: 1.250 SC SQ BAR	
KAISER ORDER NUMBER: 623482	LINE ITEM: 002	SHIP DATE: 07/06/2012	KAISER LOT NUMBER: Z00240017	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 1058.000 LB	QUANTITY: 48.000 PCS	B/L NUMBER: 603828	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00240017	0001	1	52.8	50.5	16.6	RE 93	N/A	N/A
Z00240017	0001	2	51.6	49.0	17.8	RE 93	N/A	N/A
Z00240017	0001	3	51.9	49.4	17.5	RE 94	N/A	N/A
Z00240017	0001	4	52.9	50.7	16.2	RE 93	N/A	N/A
Z00240017	0001	5	52.5	50.1	17.9	RE 94	N/A	N/A
Z00240017	0001	6	51.4	49.0	17.7	RE 94	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101758	.67	.26	.24	.09	.92	.09	.02	.03	.00	.00	.00	.01	.03

### Applicable Requirements:

ASTM-B221-12 STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 (2007) UNS#A96061  
(T6511 also conforms to T6-not applicable to other tempers)

### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

UAS  
14  
-89 12/07/27

Plant Serial: C0050003

Kaiser Order Number: 623482

Line Item: 002

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SQUARE BAR 6061-T6511

1.250" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-007

23Jul12

Signed by: \_\_\_\_\_

Pg 2/2

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

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### CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

#### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Calvin Latting, Quality & Technology Manager

*Calvin Latting*

Plant Serial: 00050003

Kaiser Order Number: 623482

Line Item: 002

Page 2 of 2

# THYSSENKRUPP MATERIALS NA

## DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511  
3.50" DIA X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-011

23Jul12

Pg 1/2

Signed by: \_\_\_\_\_

**sapa:**

Sapa Industrial Extrusions  
53 POTTSVILLE STREET

CRESSONA, PA  
17929-0187

Sapa Extrusions Inc., a Subsidiary of Sapa AB

### Invoice To Customer

THYSSENKRUPP MATERIALS NA INC  
2821 LANGSTAFF ROAD  
ATTN: ACCOUNT PAYABLE  
--  
CONCORD, ON - L4K-5C6

### Ship To Customer

THYSSENKRUPP MATERIALS NA INC  
2821 LANGSTAFF ROAD  
--  
CONCORD, ON - L4K5C6

## Certified Inspection Report

Sales Order Number	Line No.	Customer P/O	Cert Number	Page
1100483665	1	PEC-240110-001	SAPA591092	1 of 2
			Cert Creation Date	Cert Print Date
			25-JUN-12	25-JUN-12

Quantity Shipped	Date Shipped	Item Description	Specification
1900 LB	25-JUN-12	ACC-U-LINE Extruded ACC-U-ROD 3.500 DIA +/- .012	ASTMB221 REV 12 AMS-QQ-A-200/8 REV ASMESB221 REV 09 UNS#A96061 REV SAEJ454 REV Meets 6061-T6511H, 6061-T6511 REV
B/L	Item No.	SBCT 500328 144.000 IN LN FIN M-MILL W/F 11.314 F 1 CS 3.5 6061/T6511H Marking CONTINUOUS;	
Delivery Id	Item No. Rev	4330967	
Customer Part No.			
3.5ER+			

### Applicable Specifications, Revisions and Exceptions

COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on  
this certified inspection report. Remainder is Aluminum.

### Legal Statement

We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition and had the mechanical properties shown on the face of this certification. Also, note that mercury is not a normal contaminant in aluminum alloys and neither it nor any of its compounds are used in the manufacture of our product. This certification is not to be reproduced in partial form without prior written approval of our Quality Assurance Dept.

### Signature And Title

*William T. Martin, III*

William Martin III

25-JUN-12

Tech/Quality Manager

### Quantities per Lot / Packages

Package Number	Lot Number	Quantity	UOM	Weight	
				Gross	Net
G12-PKG1711554	21112151	7	PCS	956	950
G12-PKG1711554	21112151	--	--	--	--
G12-PKG1711554	21112151	--	--	--	--
G12-PKG1711558	21112151	7	PCS	956	950

### Composition Limits

12/07/22  
14  
9-89

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511

3.50" DIA X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by: \_\_\_\_\_

## Certificate of Mill Test Results

BL PEC-777693-011

23Jul12

Pg 2/2

**sapa:**

Sapa Industrial Extrusions  
53 POTTSVILLE STREET

CRESSONA, PA

17929-0187

### Certified Inspection Report

Sales Order Number	Line No.	Customer P/O
1100483665	1	PEC-240110-001

Cert Number	Page
SAPAS91092	2 of 2
Cert Creation Date	Cert Print Date
25-JUN-12	25-JUN-12

Alloy	Si		Fe		Cu		Mn		Mg		Cr		Zn	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
6061	0.40	0.80	---	0.70	0.15	0.40	---	0.15	0.80	1.20	0.04	0.35	---	0.25
Alloy	Ti		Bi		Pb		Others Each		Others Total					
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max				
6061	---	0.15	---	0.05	---	0.05	---	0.05	---	0.15				

#### Composition Results

Heat / Cast	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Bi	Pb	Others Each	Others Total
4028239	0.69	0.30	0.31	0.10	0.87	0.13	0.04	0.02	---	---	---	---

#### Mechanical Property - Test Limits

			UTS - L		TYS - L		EL 4D-Long	
			KSI		KSI		PCI	
			MIN		MAX		MIN	
Test Temper	Lot Number	# of Tests	MIN Value	MAX Value	MIN Value	MAX Value	MIN Value	MAX Value
T6511H	21112151	2	51.4	53.3	48.3	50.3	12.5	13.0

#### Cert Notes

Products manufactured with a T6511 temper also meet T6 temper requirements.

Yield strength has been determined by the 0.2% offset method

All Mill Finish Alloys produced at Sapa Extrusions comply with 0.4% Maximum Lead per RoHS, with the exception of 6262 alloy

In accordance with EN 10204 Inspection Certificate Type 3.1

Melted in the USA or Other Qualified Countries as Defined by DFARS 225.872.1

Made in USA

12/07/27  
14  
8-89

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511  
.750" X 1.50" X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-005

23Jul12

Signed by: \_\_\_\_\_

Pg 1/2

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

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### CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-239300-1		CUSTOMER PART NUMBER: ALREC00806		PRODUCT DESCRIPTION: .750 X 1.500 SC RECT BAR	
KAISER ORDER NUMBER: 621011	LINE ITEM: 001	SHIP DATE: 05/25/2012	KAISER LOT NUMBER: HK079 712	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 508.000 LB	QUANTITY: 32.000 PCS	B/L NUMBER: 603528	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
HK079 712	0001	0001	43.0	41.6	19.4	RE 97	N/A	N/A
HK079 712	0001	0002	43.1	38.1	20.5	RE 97	N/A	N/A
HK079 712	0001	0003	43.0	41.6	20.8	RE 97	N/A	N/A
HK079 712	0001	0004	46.7	39.3	20.3	RE 97	N/A	N/A
HK079 712	0001	0005	47.4	43.3	18.0	RE 97	N/A	N/A
HK079 712	0001	0006	47.8	40.0	18.0	RE 97	N/A	N/A
HK079 712	0001	0007	43.0	42.9	18.6	RE 97	N/A	N/A
HK079 712	0001	0008	48.0	41.9	18.3	RE 97	N/A	N/A
HK079 712	0001	0009	46.9	41.3	19.4	RE 97	N/A	N/A
HK079 712	0001	0010	47.9	40.1	19.8	RE 97	N/A	N/A
HK079 712	0001	0011	46.9	38.6	15.9	RE 97	N/A	N/A
HK079 712	0001	0012	48.1	44.4	19.7	RE 96	N/A	N/A
HK079 712	0001	0013	48.0	42.2	21.7	RE 96	N/A	N/A
HK079 712	0001	0014	47.0	42.1	18.7	RE 96	N/A	N/A
HK079 712	0001	0015	47.5	39.4	17.6	RE 96	N/A	N/A
HK079 712	0001	0016	48.4	40.4	15.1	RE 96	N/A	N/A
HK079 712	0001	0017	48.0	41.9	19.5	RE 95	N/A	N/A
HK079 712	0001	0018	48.1	43.1	17.6	RE 95	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
A32603	.68	.32	.24	.05	.98	.11	.06	.01	.00	.00	.00	.00	.01
A32602	.69	.32	.23	.05	.95	.10	.04	.02	.00	.00	.00	.00	.00
A32601	.70	.30	.24	.06	.97	.11	.05	.02	.00	.00	.00	.00	.00

### Applicable Requirements:

DAS  
14  
2-89 12/07/22

Plant Serial: 00045426

Kaiser Order Number: 621011

Line Item: 001



# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.750" X 1.50" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-005

23Jul12

Signed by: \_\_\_\_\_ Pg 2/2

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

*Best in Class*

### CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also  
conforms to T6-not applicable to other tempers)

### Miscellaneous Notes

MANUFACTURED IN USA (COMMERCE, CA) MELTED IN USA

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been  
inspected and tested and found in conformance with applicable specifications forming a part of the  
description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on  
Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

*Alex Yeh*

UAS  
14  
8-89 12/07/27

Plant Serial: 00045426

Kaiser Order Number: 621011

Line Item: 001

Page 2 of 2

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

2.00" x 2.50" X 144.0000"

PART NO. OFFERING\*\*\*\*\*

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by: \_\_\_\_\_

## Certificate of Mill Test Results

BL PEC-777693-009

23Jul12

Pg 1/1



### MILL TEST REPORT

TEL: (416)745-4444 FAX: (416)745-0925 1-800-668-7210  
411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4  
<http://www.extrudex.com>

BILL TO

THYSSENKRUPP MATERIALS, NA

SHIP TO

THYSSENKRUPP MATERIALS, NA

SO DESCRIPTION

2"x2.5" FB

Cert Code:

1

0.02

CUSTOMER PO

PEC-239512

CUSTOMER PART NUMBER

DIE NUMBER

S 23922

ALLOY TEMPER

6061 T6511

PART DESCRIPTION

DATE OF SHIPMENT

7/16/2012

SALESMAN

FORBES DODWELL

EXTRUDEX ORDER NO.

146935 - 4

MANIFEST NO.

270266

MADE IN CANADA

CERTIFICATION

MILL TEST ASTM B221

### Mechanical Properties

Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness	Conductivity
A.11	6061	Jul/13/12	45.2	42.4	13.30	89.3, 89.0, 89.8	

### Chemical Composition

Cast Number	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
A.11 C7331164 6061	0.61	0.18	0.19	0.01	0.86	0.06	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Remainder	0.00

David Natale  
Quality Control Manager

12/07/27  
14  
9-89

1 - CUSTOMER COPY

MILL TEST REPORT

DART AEROSPACE

PO/Rel 17463

BL PEC-777693-012

23Jul12

ALUMINUM SHEET 6061 T6  
.0810 Nom X 48.0000" X 144.0000"  
PART NO.

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by: \_\_\_\_\_ Pg 1/2



### Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate – mill certificate

Nr.: 85289222 02 / 7

Rev. 0

Seite / page: 1 von / of 2

Datum / date: 2012 02 15

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, NADCAP

<b>Auftraggeber / customer:</b> ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD,ON	<b>Bestell Nr. / order no.:</b> PEC-236262 <b>Datum / date:</b> 2012 01 19
<b>Warenempfänger / consignee:</b> ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD,ON	<b>Auftragsbest. Nr. / order confirm. no.:</b> 636296 <b>Datum / date:</b> 2012 01 20
<b>Endkunde, Bestell-Nr. / Your cust., ord. no.:</b>	<b>Lieferschein Nr. / delivery note:</b> 85289222 <b>Datum / date:</b> 2012 02 29
	<b>Akkreditiv Nr. / letter of credit no.:</b>

<b>Produkt/product</b>	<b>Bedingungen/terms</b>
Form / form: Sheet Werkstoff / material: 6061 Zustand / temper: T6 Dim. / dim: (inch): 0,080x48,00x144,00 Kundenartikel-Nr / customer article no.:	Techn. Lieferbedingungen / techn. spec.: AMS-QQ-A-250/11, 08.1997 ASTM B 209 - 07 Material meets also the mech. properties of AMS 4027N, 07.2008, but not marked ANSI H35.2-2009 ASME SB 209, 2007
	Sondervorschrift / special terms:

AB-Pos. ord.-item.	BNr/Los/Tellios Lot/No./Part	Guss Nr. cast no.	Werkstoff material	Kollo packno.	Gewicht netto weight net	Stk. pcs.
02	25872/01/00	01/0047294/1	6061.1	6362960002	4029,982 lbs	77

Chemische Zusammensetzung / chemical composition: [%] Gewichtsanteile / weight proportion (OES)											
Guss Nr. / cast no.	AMAG designation	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	
01/0047294/1	6061.1										
	actual	0,65	0,48	0,23	0,11	0,91	0,18	0,01	0,04	0,06	

Zugversuch / Tensile test											
BNr/Los Lot/No.	Zustand temper	Richtung direction			Rm [ksi]	Rp0.2 [ksi]	A2" [%]				
25872/01	T6	LT			47,0	39,2	16				
25872/01	T6	LT			47,1	39,2	15				
25872/01	T6	LT			47,3	39,3	15				
25872/01	T6	LT			47,0	39,2	16				
25872/01	T6	LT			46,8	39,0	16				
25872/01	T6	LT			46,7	38,9	15				
25872/01	T6	LT			46,7	38,9	15				
25872/01	T6	LT			46,8	39,0	16				
25872/01	T6	LT			46,6	38,7	15				

DA  
14  
2-89 12/07/27

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – [www.amag.at](http://www.amag.at)  
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – [www.amag.at](http://www.amag.at)

# THYSSENKRÜPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 6061 T6  
.0810 Nom X 48.0000" X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-012

23Jul12

Signed by: \_\_\_\_\_ Pg 2/2



### Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate – mill certificate

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, ENAS 9100, ISO 14001, NADCAP

Nr.: 85289222 02 / 7

Rev. 0

Seite / page: 2 von / of 2

Datum / date: 2012 02 15

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.  
We hereby certify that the material described above has been tested and complies with the terms of the order  
contract.

Werkssachverständiger / factory specialist	E-Mail / e-mail
Josef Klampfer	j.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.  
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – [www.amag.at](http://www.amag.at)  
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – [www.amag.at](http://www.amag.at)



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 1 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Buyer

Chantal Lavoie

Vendor Phone

905 669 9444

Requisition Nbr

Vendor Fax

905 738 9033

Tax Resale Nbr

10127-2607

Vendor Account Nbr

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

REUSED

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
3	M303B1.000X1.000 050	303 BAR 1" X 1"	7/25/12 Yes	12.00 f 12.7	Yours ppd	\$13.7500	\$165.00
		Special Inst: MATERIAL: AISI 303 SS BAR AS PER ASTM A582  NOTE: AISI 304/316 NOT ACCEPTABLE					
4	M304B0.500X2.500 050	304 BAR .500 x 2.50	7/25/12 Yes	24.00 f	Yours ppd	\$12.9083	\$309.80
		Special Inst: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240  (NOTE: AISI 303 NOT ACCEPTABLE)					
5	M304B0.625X3.000 050	304 BAR .625 X 3.00	7/25/12 Yes	12.00 f	Yours ppd	\$20.2500	\$243.00

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required - YES NO

Change Nbr: 2

Change Date: 7/17/12



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 2 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Special Inst: AISI 304/316 SS BAR OR AISI 304/316 SS  
PLATE  
AS PER ASTM A276 OR ASTM A240

(NOTE: AISI 303 NOT ACCEPTABLE)

6	M304S11GA 000	304/316 0.125 Sheet	7/23/12 Yes	✓ 280.00 sf	Yours ppd 6/27/12	\$9.0193	\$2,525.40 7
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Special Inst: MATERIAL: AISI 304/316 SS SHEET  
ANNEALED 2B FINISH  
AS MIL-S-5059 OR AMS 5513 (304) OR  
AMS 5524 (316)  
OR ASTM A240 OR ASME SA240

7	M6061T6B0.500X01.250 010	6061-T6 Bar .500 x 1.25	7/23/12 Yes	✓ 24.00 f	Yours ppd 6/27/12	\$1.5750	\$37.80
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Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

8	M6061T6B0.500X06.000 004	6061-T6 Bar .500 x 6.00	7/23/12 Yes	✓ 24.00 f	Yours ppd 6/27/12	\$7.1667	\$172.00
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No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required **YES** NO

Change Nbr: 2

Change Date: 7/17/12



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 3 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Special Inst:

MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

9 M6061T6B0.750X01.500 6061-T6 Bar .750 X 1.50

7/23/12

Yes

✓ 24.00

Yours ppd

\$2.6667

\$64.00

003

Special Inst:

MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

10 M6061T6B1.000X04.000 6061-T6 Bar 1.00 x 4.00

7/23/12

Yes

✓ 24.00

Yours ppd

\$9.4167

\$226.00

004

Special Inst:

MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

11 M6061T6B1.250X01.250 6061-T6 Bar 1.25 x 1.25

7/23/12

Yes

✓ 12.00

Yours ppd

\$3.6667

\$44.00

003

No substitution or deviation without  
consent.

Certificate of Conformity or Material  
Certification required YES NO

Change Nbr: 2

Change Date: 7/17/12



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 4 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

12	M6061T6B1.500X02.000	6061-T6 Bar 1.50 x 2.00	7/23/12	12.00	Yours ppd	\$7.0000	\$84.00
	oio		Yes	f			

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

13	M6061T6B2.000X02.250	6061-T6 Bar 2.00 x 2.25	7/23/12	12.00	Yours ppd	\$11.8333	\$142.00
	oo9		Yes	f			

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

14	M6061T6R1.000	ROUND BAR 1.00"	7/23/12	24.00	Yours ppd	\$1.8333	\$44.00
	d3		Yes	f			

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required **YES** NO

Change Nbr: 2

Change Date: 7/17/12





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 5 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Special Inst:

MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM/  
ROUND BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/  
4115/4116 OR QQ-A-200/8 OR AMS-QQ-  
A-200/8 OR AMS 4160  
OR ASTM B211 OR ASTM B221

15	M6061T6R3.500 006	6061 RD bar 3.50	7/23/12 Yes	12.00 f	Yours ppd 1/12/12	\$23.5000	\$282.00
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Special Inst:

MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
ROUND BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/  
4115/4116 OR QQ-A-200/8 OR AMS-QQ-  
A-200/8 OR AMS 4160  
OR ASTM B211 OR ASTM B221

16	M6061T6S.032 021	6061-T6 Sheet 0.032"	7/23/12 Yes	96.00 sf	Yours ppd	\$1.9792	\$190.00
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Special Inst:

MATERIAL: 6061-T6/T62 ALUMINUM  
SHEET  
AS PER QQ-A-250/11 OR AMS-QQ-A-  
250/11 OR  
AMS 4025 OR AMS 4027 OR ASTM B209

17	M6061T6S.080 021	6061-T6 .080 Sheet	7/23/12 Yes	96.00 sf	Yours ppd 1/14/12	\$3.1042	\$298.00
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No substitution or deviation without  
consent.

Certificate of Conformity of Material  
Certification required - YES NO

Change Nbr: 2

Change Date: 7/17/12



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 6 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM  
SHEET  
AS PER QQ-A-250/11 OR AMS-QQ-A-  
250/11 OR  
AMS 4025 OR AMS 4027 OR ASTM B209

18	M6061T6S.125	6061-T6 .125 Sheet	7/23/12	64.00	Yours ppd	\$4.8438	\$310.00
			Yes	\$f			

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM  
SHEET  
AS PER QQ-A-250/11 OR AMS-QQ-A-  
250/11 OR  
AMS 4025 OR AMS 4027 OR ASTM B209

19	M7075T73B2.500X03.25	7075-T73 Bar 2.50 x 3.25	7/23/12	6.00	Yours ppd	\$49.6667	\$298.00
			Yes	f			

Special Inst: 7075-T73 (OR 7075-  
T7351/T73510/T73511) BAR PER ASM-  
QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS  
4124) OR AMS-QQ-A-250/12 (AMS 4078)

PO Total: \$5,435.00

Change Nbr: 2

Change Date: 7/17/12

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required **YES** NO

07/17/12

02:23 PM EDT

**STELfax**

**From:** THYSSENKRUPP MATERIALS NA  
STAN IVERS  
Tel: 905 669 9444  
Fax: 9057389033

**To:** DART AEROSPACE  
Attn: 96294  
Tel: 613-632-9577  
Fax: 613-632-1053  
Number of Pages: 4

**Subject:** Sales Acknowledgement

---

17Jul12 14:22      S A L E S    A C K N O W L E D G M E N T      No: PEC ST-472083  
 Sold By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Sold To:    ( 20115)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7

Ship To:    ( 1)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS      Ord 17Jul12 Due19Jul12  
 Frt PREPAID      Via VIM TRANSFER      FOB CONCORD  
 Con 96294      PO/Rel 17463  
 Slp STAN IVERS (905-532-1350)      Tel 613-632-9577 Fax 613-632-1053

S A L E S    A C K N O W L E D G M E N T      SO No PEC ST-472083  
 Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

1 STAINLESS STEEL SQ BAR 303 STAINLESS 1.00" X 151.0000" MATERIAL ENERGY & CAP SURCHG	1 PCS @ 165.0000 EA 25.0000 LOT	43 LBS 165.00 25.00
2 STAINLESS STEEL SHEET 304-2B .1200 Nom X 48.0000" X 120.0000" MATERIAL	7 PCS @ 360.7714 EA	1,403 LBS 2,525.40
3 ALUMINUM FLAT BAR 6061-T6511 .50" x 1.250" X 144.0000" MATERIAL	2 PCS 24 FT @ 1.5750 FT	18 LBS 24 FT 37.80
4 ALUMINUM FLAT BAR 6061-T6511 .50" X 6.00" X 144.0000" MATERIAL	2 PCS 24 FT @ 7.1667 FT	86 LBS 24 FT 172.00
5 ALUMINUM FLAT BAR 6061-T6511 .750" X 1.50" X 144.0000" MATERIAL	2 PCS 24 FT @ 2.6667 FT	32 LBS 24 FT 64.00
6 ALUMINUM FLAT BAR 6061-T6511 1.00" x 4.00" X 144.0000" MATERIAL	2 PCS 24 FT @ 9.4167 FT	113 LBS 24 FT 226.00
7 ALUMINUM SQUARE BAR 6061-T6511 1.250" X 144.0000" MATERIAL	1 PCS 12 FT @ 3.6667 FT	22 LBS 12 FT 44.00
8 ALUMINUM FLAT BAR 6061-T6511 1.50" x 2.00" X 144.0000" MATERIAL	1 PCS 12 FT @ 7.0000 FT	42 LBS 12 FT 84.00
9 ALUMINUM FLAT BAR 6061-T6511 2.00" x 2.50" X 144.0000" Part No OFFERING***** MATERIAL	1 PCS 12 FT @ 11.8333 FT	71 LBS 12 FT 142.00

17Jul12 14:22      S A L E S    A C K N O W L E D G M E N T      No: PEC ST-472083

Sold By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Sold To:    ( 20115)  
 DART AEROSPACE

Ship To:    (    1)  
 DART AEROSPACE

S A L E S    A C K N O W L E D G M E N T      SO No PEC ST-472083  
 Test Certs: Chem Y Phys Y    1 Original copies with Shipment, 1 with Invoice

10	ALUMINUM ROUND BAR 6061-T6511	2 PCS	22 LBS
	1.00" DIA X 144.0000"		24 FT
	MATERIAL	24 FT @ 1.8333 FT	44.00
11	ALUMINUM ROUND BAR 6061-T6511	1 PCS	141 LBS
	3.50" DIA X 144.0000"		12 FT
	MATERIAL	12 FT @ 23.5000 FT	282.00
12	ALUMINUM SHEET 6061 T6	2 PCS	109 LBS
	.0810 Nom X 48.0000" X 144.0000"		
	MATERIAL	2 PCS @ 149.0000 EA	298.00
13	ALUMINUM SHEET 6061 T6	2 PCS	112 LBS
	.1250 Nom X 48.0000" X 96.0000"		
	MATERIAL	2 PCS @ 155.0000 EA	310.00
14	ALUMINUM PLATE 7075T7351	1 PCS	58 LBS
	2.50" THICK X 3.2500" X 72.0000"		
	Part No PLATE ASTM B 209 QQ-A-250/12		
	<<<----- SPECIFICATIONS ----->>>		
	Ga Tol + 0.0000 - 0.0000 Pc/Tag 1		
	WthTol + 0.0630 - 0.0000 Wt/Skd		
	LthTol + 0.0630 - 0.0000 Ty Pk		
	MATERIAL	1 PCS @ 298.0000 EA	298.00

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
 TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*

\*\* REFERENCED ON IT \*\*

\*\* CUSTOMER PICK-UP HRS / 9:00 AM TO 4:00 PM \*\*

\*\*\* TEL. 800-926-2600 \*\*\*

\*\*\*\*\*

\* WE STOCK STAINLESS STEEL!!!! \*

\* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*

\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
 ADDED TO EVERY ORDER.\*\*\*

\*\*\*\*\*

\*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

\*VISIT OUR WEBSITE: [www.copperandbrass.com](http://www.copperandbrass.com)

\*\*\*\*\*

Order Totals:      14 Items      2,272 LBS

\*\*\*\*\*

Material	Processing	Freight	Other	Taxes	ORDER AMT
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Page:    2 ....Continued

Ship To: ( 1)  
DART AEROSPACE

```

S A L E S      A C K N O W L E D G M E N T      SO No PEC ST-472083
Test Certs: Chem Y Phys Y   1 Original copies with Shipment, 1 with Invoice
  4,692.20                               25.00       613.23       5,330.43
*****
Taxes: ONHSTS      613.23

```



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

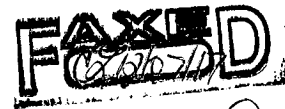
PO Print Date 7/17/12

Page Number 1 of 7

Order From : VC-COP001  
THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA



Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M174B1.500X02.250	17-4 SS Bar 1.50 X2.250	7/30/12 Yes	12.00 f	Yours ppd	\$53.5933	\$643.12
		<b>Special In :</b> MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 GRAIN MUST BE ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100 KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI					
2	M2024T3S.063 <i>cancel</i>	2024-T3 .063 sheet	7/23/12 Yes	96.00 sf	Yours ppd	\$5.9375	\$570.00
		<b>Special Inst:</b> MATERIAL: 2024-T3 ALUMINUM SHEET QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209					
3	M303B1.000X1.000	303 BAR 1" X 1"	7/25/12 Yes	12.00 f	Yours ppd	\$13.7500	\$165.00

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required - YES NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO17463**

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 2 of 7

Order From : VC-COP001  
THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Special Inst: MATERIAL: AISI 303 SS BAR AS PER  
ASTM A582

NOTE: AISI 304/316 NOT ACCEPTABLE

4	M304B0.500X2.500	304 BAR .500 x 2.50	7/25/12	24.00	Yours ppd	\$12.9083	\$309.80
			Yes	f			

Special Inst: AISI 304/316 SS BAR OR AISI 304/316 SS  
PLATE  
AS PER ASTM A276 OR ASTM A240

(NOTE: AISI 303 NOT ACCEPTABLE)

5	M304B0.625X3.000	304 BAR .625 X 3.00	7/25/12	12.00	Yours ppd	\$20.2500	\$243.00
			Yes	f			

Special Inst: AISI 304/316 SS BAR OR AISI 304/316 SS  
PLATE  
AS PER ASTM A276 OR ASTM A240

(NOTE: AISI 303 NOT ACCEPTABLE)

6	M304S11GA	304/316 0.125 Sheet	7/23/12	280.00	Yours ppd	\$9.0193	\$2,525.40
			Yes	sf			

Special Inst: MATERIAL: AISI 304/316 SS SHEET  
ANNEALED 2B FINISH  
AS MIL-S-5059 OR AMS 5513 (304) OR  
AMS 5524 (316)  
OR ASTM A240 OR ASME SA240

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required - YES NO

Change Nbr: 1

Change Date: 7/17/12





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 3 of 7

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

7	M6061T6B0.500X01.250	6061-T6 Bar .500 x 1.25	7/23/12	24.00	Yours ppd	\$1.5750	\$37.80
			Yes	f			

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

8	M6061T6B0.500X06.000	6061-T6 Bar .500 x 6.00	7/23/12	24.00	Yours ppd	\$7.1667	\$172.00
			Yes	f			

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

9	M6061T6B0.750X01.500	6061-T6 Bar .750 X 1.50	7/23/12	24.00	Yours ppd	\$2.6667	\$64.00
			Yes	f			

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required - YES NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 4 of 7

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone

905 669 9444

Vendor Fax

905 738 9033

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

10	M6061T6B1.000X04.000	6061-T6 Bar 1.00 x 4.00	7/23/12 Yes	24.00 f	Yours ppd	\$9.4167	\$226.00
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Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

11	M6061T6B1.250X01.250	6061-T6 Bar 1.25 x 1.25	7/23/12 Yes	12.00 f	Yours ppd	\$3.6667	\$44.00
----	----------------------	-------------------------	----------------	------------	-----------	----------	---------

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

12	M6061T6B1.500X02.000	6061-T6 Bar 1.50 x 2.00	7/23/12 Yes	12.00 f	Yours ppd	\$7.0000	\$84.00
----	----------------------	-------------------------	----------------	------------	-----------	----------	---------

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

No substitution or deviation without  
consent.

Certificate of Conformity or Material  
Certification required - YES NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 5 of 7

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

13	M6061T6B2.000X02.250	6061-T6 Bar 2.00 x 2.25	7/23/12 Yes	12.00 f	Yours ppd	\$11.8333	\$142.00
----	----------------------	-------------------------	----------------	------------	-----------	-----------	----------

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR  
AMS 4160 OR ASTM B211 OR  
ASTM B221

14	M6061T6R1.000	ROUND BAR 1.00"	7/23/12 Yes	24.00 f	Yours ppd	\$1.8333	\$44.00
----	---------------	-----------------	----------------	------------	-----------	----------	---------

Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
ROUND BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/  
4115/4116 OR QQ-A-200/8 OR AMS-QQ-  
A-200/8 OR AMS 4160  
OR ASTM B211 OR ASTM B221

15	M6061T6R3.500	6061 RD bar 3.50	7/23/12 Yes	12.00 f	Yours ppd	\$23.5000	\$282.00
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Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
ROUND BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/  
4115/4116 OR QQ-A-200/8 OR AMS-QQ-  
A-200/8 OR AMS 4160  
OR ASTM B211 OR ASTM B221

No substitution or deviation without  
consent.

Certificate of Conformity or Material  
Certification required: YES NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO17463**

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 6 of 7

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

16	M6061T6S.032	6061-T6 Sheet 0.032"	7/23/12 Yes	96.00 sf	Yours ppd	\$1.9792	\$190.00
----	--------------	----------------------	----------------	-------------	-----------	----------	----------

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM  
SHEET  
AS PER QQ-A-250/11 OR AMS-QQ-A-  
250/11 OR  
AMS 4025 OR AMS 4027 OR ASTM B209

17	M6061T6S.080	6061-T6 .080 Sheet	7/23/12 Yes	96.00 sf	Yours ppd	\$3.1042	\$298.00
----	--------------	--------------------	----------------	-------------	-----------	----------	----------

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM  
SHEET  
AS PER QQ-A-250/11 OR AMS-QQ-A-  
250/11 OR  
AMS 4025 OR AMS 4027 OR ASTM B209

18	M6061T6S.125	6061-T6 .125 Sheet	7/23/12 Yes	64.00 sf	Yours ppd	\$4.8438	\$310.00
----	--------------	--------------------	----------------	-------------	-----------	----------	----------

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM  
SHEET  
AS PER QQ-A-250/11 OR AMS-QQ-A-  
250/11 OR  
AMS 4025 OR AMS 4027 OR ASTM B209

19	M7075T73B2.500X03.25	7075-T73 Bar 2.50 x 3.25	7/23/12 Yes	6.00 f	Yours ppd	\$49.6667	\$298.00
----	----------------------	--------------------------	----------------	-----------	-----------	-----------	----------

No substitution or deviation without  
consent.

Certificate of Conformity or Material  
Certification required **YES** NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO17463**

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 7 of 7

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Special Inst: 7075-T73 (OR 7075-  
T7351/T73510/T73511) BAR PER ASM-  
QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS  
4124) OR AMS-QQ-A-250/12 (AMS 4078)

PO Total:

\$6,648.12

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

*W CQ*

Change Nbr: 1

Change Date: 7/17/12

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required - YES NO

## Q U O T A T I O N

No: PEC ST-471216

Quoted By:  
THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 9057389033

Quoted To: ( 20115)  
DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

Quoted Ship To: ( 1)  
DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Qtd 13Jul12 Qte Ref  
Frt PREPAID Via FOB  
Tel 613-632-9577 Fax 613-632-1053 Ctc CHANTAL  
Slp STAN IVERS (905-532-1350)

## Q U O T A T I O N

QT No: PEC ST-471216

Test Certs: Chem-Y Phys-Y 1 Original copies with Shipment, 1 with Invoice

1 STAINLESS STEEL PLATE 17-4 1.50 X 2.2500" X 144.0000" Part No 7-10 DAYS PLATE ASTM A 484 MATERIAL ENERGY & CAP SURCHG	1 PCS @ 643.1200 EA 25.0000 LOT	137 LBS 643.12 25.00
2 ALUMINUM SHEET 2024 -T3 .0640 Nom X 48.0000" X 144.0000" Part No MATERIAL DUE SEPT 15 MATERIAL SKID	2 PCS @ 285.0000 EA 25.0000 LOT	86 LBS 570.00 25.00
3 STAINLESS STEEL SQ BAR 303 STAINLESS 1.00" X 144.0000" Part No 4-6 DAYS A.R.O MATERIAL	1 PCS @ 165.0000 EA	41 LBS 165.00
4 STAINLESS STEEL PLATE 304L .50" THICK X 2.5000" X 144.0000" Part No CUT PLATE 5-7DAYS ASTM A 240 <<<----- SPECIFICATIONS ----->>> Ga Tol + 0.0000 - 0.0000 Pc/Tag 2 WthTol + 0.0630 - 0.0000 Wt/Skd LthTol + 0.0000 - 0.0000 Ty Pk MATERIAL	2 PCS @ 154.9000 EA	105 LBS 309.80
5 STAINLESS STEEL PLATE 304L .625" THICK X 3.0000" X 144.0000" Part No CUT PLATE 5-7DAYS ASTM A 240 <<<----- SPECIFICATIONS ----->>> Ga Tol + 0.0000 - 0.0000 Pc/Tag 1 WthTol + 0.0630 - 0.0000 Wt/Skd LthTol + 0.0000 - 0.0000 Ty Pk	1 PCS	77 LBS

~~6061T6 B 2" x 8" X 12 ft~~

## Q U O T A T I O N

No: PEC ST-471216

Quoted By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Quoted To: ( 20115)  
 DART AEROSPACE

Quoted Ship To: ( 1)  
 DART AEROSPACE

===== Q U O T A T I O N =====				QT No: PEC ST-471216
MATERIAL	1 PCS @	243.0000 EA		243.00
6 STAINLESS STEEL SHEET 304-2B .1200 Nom X 48.0000" X 120.0000"	7 PCS		1403 LBS	
MATERIAL	7 PCS @	360.7714 EA		2,525.40
7 ALUMINUM FLAT BAR 6061-T6511 .50" x 1.250" X 144.0000"	2 PCS		18 LBS	
MATERIAL	24 FT @	1.5750 FT	24 FT	37.80
8 ALUMINUM FLAT BAR 6061-T6511 .50" X 6.00" X 144.0000"	2 PCS		86 LBS	
MATERIAL	24 FT @	7.1667 FT	24 FT	172.00
9 ALUMINUM FLAT BAR 6061-T6511 .750" X 1.50" X 144.0000"	2 PCS		32 LBS	
MATERIAL	24 FT @	2.6667 FT	24 FT	64.00
10 ALUMINUM FLAT BAR 6061-T6511 1.00" x 4.00" X 144.0000"	2 PCS		113 LBS	
MATERIAL	24 FT @	9.4167 FT	24 FT	226.00
11 ALUMINUM SQUARE BAR 6061-T6511 1.250" X 144.0000"	1 PCS		22 LBS	
MATERIAL	12 FT @	3.6667 FT	12 FT	44.00
12 ALUMINUM FLAT BAR 6061-T6511 1.50" x 2.00" X 144.0000"	1 PCS		42 LBS	
MATERIAL	12 FT @	7.0000 FT	12 FT	84.00
13 ALUMINUM FLAT BAR 6061-T6511 2.00" x 2.50" X 144.0000" Part No OFFERING***** **	1 PCS		71 LBS	
MATERIAL	12 FT @	11.8333 FT	12 FT	142.00
14 ALUMINUM ROUND BAR 6061-T6511 1.00" DIA X 144.0000"	2 PCS		22 LBS	
MATERIAL	24 FT @	1.8333 FT	24 FT	44.00
15 ALUMINUM ROUND BAR 6061-T6511 3.50" DIA X 144.0000"	1 PCS		141 LBS	
MATERIAL	12 FT @	23.5000 FT	12 FT	282.00
16 ALUMINUM SHEET 6061 T6 .0320 Nom X 48.0000" X 144.0000" Part No 4-6 DAYS A.R.O	2 PCS		43 LBS	

## Q U O T A T I O N

No: PEC ST-471216

Quoted By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Quoted To: ( 20115)  
 DART AEROSPACE

Quoted Ship To: ( 1)  
 DART AEROSPACE

Q U O T A T I O N				QT No: PEC ST-471216
MATERIAL	2 PCS @	95.0000 EA		190.00
SKID		25.0000 LOT	✓	25.00
-----				
17 ALUMINUM SHEET 6061 T6	2 PCS			109 LBS
.0810 Nom X 48.0000" X 144.0000"				
MATERIAL	2 PCS @	149.0000 EA	✓	298.00
-----				
18 ALUMINUM SHEET 6061 T6	2 PCS			112 LBS
.1250 Nom X 48.0000" X 96.0000"				
MATERIAL	2 PCS @	155.0000 EA		310.00
-----				
19 ALUMINUM PLATE 7075T7351	1 PCS			58 LBS
2.50" THICK X 3.2500" X 72.0000"				
Part No PLATE ASTM B 209 QQ-A-250/12				
<<<----- SPECIFICATIONS ----->>>				
Ga Tol + 0.0000 - 0.0000 Pc/Tag	1			
WthTol + 0.0630 - 0.0000 Wt/Skd				
LthTol + 0.0630 - 0.0000 Ty	Pk			
MATERIAL	1 PCS @	298.0000 EA		298.00

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
 TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*

\*\* REFERENCED ON IT \*\*

Price in effect at time of shipment.

Price based on receipt of total order.

All weights are theoretical.

All orders are subject to credit approval.

\*\*\*\* TEL. 800-926-2600 \*\*\*\*

\*\*\* CUSTOMER PICK-UP HOURS \*\*\*

\*\*\* 9:00 AM TO 4:00 PM \*\*\*

\*\*\*\*\*

\* WE STOCK STAINLESS STEEL!!!! \*

\* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*

\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
 ADDED TO EVERY ORDER.\*\*\*

\*\*\*\*\*

\*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

\*VISIT OUR WEBSITE: [www.copperandbrass.com](http://www.copperandbrass.com)

\*\*\*\*\*

Order Totals:				19 Items	2718 LBS
Material	Processing	Freight	Other	Taxes	ORDER AMT
6,648.12			75.00	874.00	7,597.12



Q U O T A T I O N

No: PEC ST-471216

Quoted By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Quoted To: ( 20115)  
 DART AEROSPACE

Quoted Ship To: ( 1)  
 DART AEROSPACE

=====

		Q U O T A T I O N		QT No: PEC ST-471216
Taxes: ONHSTS	874.00	0.00	0.00	0.00

## B I L L O F L A D I N G

No: PEC 777693

Ship From:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW  
 Probill  
 Via VIM TRANSFER  
 FOB CONCORD  
 Frt PREPAID  
 Route 0- 0 Manifest  
 Vhcle Trailer  
 Slp STAN IVERS (905-532-1350)  
 Sold To: ( 20115)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7

Ship To: ( 1)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7  
 Tel: 613-632-9577 Fax: 613-632-1053

## B I L L O F L A D I N G

1) Our Order PEC-472083- 1 Your PO # 17463  
 STAINLESS STEEL SQ BAR 303 STAINLESS  
 1.00" X 151.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
245298	88401	12 ' 7.0000 "	1	43

2) Our Order PEC-472083- 2 Your PO # 17463  
 STAINLESS STEEL SHEET 304-2B  
 .1200 Nom X 48.0000" X 120.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
SF29688	88728	280.00 SFT	7	1347

3) Our Order PEC-472083- 3 Your PO # 17463  
 ALUMINUM FLAT BAR 6061-T6511  
 .50" x 1.250" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
Z00248009	88402	24 FT	2	17

4) Our Order PEC-472083- 4 Your PO # 17463  
 ALUMINUM FLAT BAR 6061-T6511  
 .50" X 6.00" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
201210006	88403	24 FT	2	84

5) Our Order PEC-472083- 5 Your PO # 17463  
 ALUMINUM FLAT BAR 6061-T6511  
 .750" X 1.50" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
HK079 712	88404	24 FT	2	32

Page: 1 ....Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
 RAPPORTÉES IMMÉDIATEMENT

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMÉRO D'APPROBATION SEULEMENT  
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER

SHIP FROM:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Ship To: ( 1 )  
 DART AEROSPACE

B I L L O F L A D I N G  
 No: PEC 777693  
 Ship Date 23Jul12 at 10:57 From PFW  
 Probill  
 Via VIM TRANSFER  
 FOB CONCORD  
 Frt PREPAID  
 Route 0- 0 Manifest  
 Vhcle Trailer  
 Slp STAN IVERS (905-532-1350)  
 Sold To: ( 20115 )  
 DART AEROSPACE

## B I L L O F L A D I N G

6) Our Order PEC-472083- 6 Your PO # 17463

ALUMINUM FLAT BAR 6061-T6511

1.00" x 4.00" X 144.0000"

Heat Number  
 201210303

Tag No  
 88405

Quantity  
 24 FT

PCS  
 2

Wt LBS  
 114

7) Our Order PEC-472083- 7 Your PO # 17463

ALUMINUM SQUARE BAR 6061-T6511

1.250" X 144.0000"

Heat Number  
 Z00240017

Tag No  
 88406

Quantity  
 12 FT

PCS  
 1

Wt LBS  
 23

8) Our Order PEC-472083- 8 Your PO # 17463

ALUMINUM FLAT BAR 6061-T6511

1.50" x 2.00" X 144.0000"

Heat Number  
 201209117

Tag No  
 88407

Quantity  
 12 FT

PCS  
 1

Wt LBS  
 43

9) Our Order PEC-472083- 9 Your PO # 17463

Part # OFFERING\*\*\*\*\* Rel #

ALUMINUM FLAT BAR 6061-T6511

2.00" x 2.50" X 144.0000"

Heat Number  
 C7331164

Tag No  
 88408

Quantity  
 12 FT

PCS  
 1

Wt LBS  
 71

10) Our Order PEC-472083- 10 Your PO # 17463

ALUMINUM ROUND BAR 6061-T6511

1.00" DIA X 144.0000"

Heat Number  
 Z00216020

Tag No  
 88409

Quantity  
 24 FT

PCS  
 2

Wt LBS  
 23

11) Our Order PEC-472083- 11 Your PO # 17463

ALUMINUM ROUND BAR 6061-T6511

3.50" DIA X 144.0000"

Page: 2 ....Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
 RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMÉRO D'APPROBATION SEULEMENT  
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER

## B I L L O F L A D I N G

Ship From:  
 THYSSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

No: PEC 777693  
 Ship Date 23Jul12 at 10:57 From PFW  
 Probill  
 Via VIM TRANSFER  
 FOB CONCORD  
 Frt PREPAID  
 Route 0- 0 Manifest  
 Vhcle Trailer  
 Slp STAN IVERS (905-532-1350)  
 Sold To: ( 20115)  
 DART AEROSPACE

Ship To: ( 1)  
 DART AEROSPACE

## B I L L O F L A D I N G

Heat Number	Tag No	Quantity	PCS	Wt LBS
21112151	88410	12 FT	1	140

12) Our Order PEC-472083- 12 Your PO # 17463  
 ALUMINUM SHEET 6061 T6  
 .0810 Nom X 48.0000" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
25872/01/00	88035	96.00 SFT	2	105

13) Our Order PEC-472083- 13 Your PO # 17463  
 ALUMINUM SHEET 6061 T6  
 .1250 Nom X 48.0000" X 96.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
30286/01/00	88036	64.00 SFT	2	109

14) Our Order PEC-472083- 14 Your PO # 17463  
 Part # PLATE ASTM B 209 QQ-A-250/12 Rel #  
 ALUMINUM PLATE 7075T7351  
 2.50" THICK X 3.2500" X 72.0000"  
 \*\*\* BACK ORDER \*\*\*

TOTAL:	Tags	PCS	LBS
	13	26	2151

Heat Number  
 201209117  
 201210006  
 201210303  
 21112151  
 245298  
 25872/01/00  
 30286/01/00  
 HK079 712  
 SF29688  
 Z00216020

\*\*\* Chemical Analysis \*\*\*

Page: 3 ....Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
 RAPPORTÉES IMMÉDIATEMENT  
 ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY  
 RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT  
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER

## B I L L O F L A D I N G

Ship From:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

No: PEC 777693  
 Ship Date 23Jul12 at 10:57 From PFW  
 Probill  
 Via VIM TRANSFER  
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 Route 0- 0 Manifest  
 Vhcle Trailer  
 Slp STAN IVERS (905-532-1350)  
 Sold To: (20115)  
 DART AEROSPACE

Ship To: (1)  
 DART AEROSPACE

## B I L L O F L A D I N G

Z00240017  
 Z00248009

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
 TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*  
 \*\* REFERENCED ON IT \*\*

TOTAL 1 BDL, 2 SKIDS GW. 2477 LBS

\*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA  
 CONCORD, ONT.\* \*\*\* 9:00 AM TO 4:00 PM \*\*\*

\*\*\*\* TEL. 800-926-2600 \*\*\*\*

\*\*\*\*\*

\* WE STOCK STAINLESS STEEL \*

\* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*

\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
 ADDED TO EVERY ORDER.\*\*\*

Page: 4 .... Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
 RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.  
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL SQ BAR 303 STAINLESS

1.00" X 151.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

## Certificate of Mill Test Results

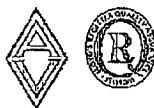
BL PEC-777693-001

23Jul12

Signed by:

Pg 1/1

### Acciaierie Valbruna S.p.A.



36100 VICENZA (Italia) - Viale della scienza, 25 z.l.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Clienti / Kunden / Customers:  
VALBRUNA CANADA LTD  
8724 HOLGATE CRESCENT  
CON-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.  
Hersteller/Usine producer

Avviso di Spedizione: D-VI03000486  
Lieferantenpacking list/L

Ordine nr: 706001820 STOCK  
Bestellungsnummer/Commande

CERTIFICATO DI COLLAUDO  
ABNAHMEPRUEFZEUGNIS  
INSPECTION CERTIFICATE  
CERTIFICAT DE RECEPTION  
EN 10204 (2005), 3.1

Certificato nr: MEST576706/2008/  
Prüfungsausschuss

Conferma ordine nr: EI07004722  
Werte-Our Order/Fdfr.

Marchio di Fabbrica:  
de chens des L. et des marques  
Trade mark  
Style de l'usine producer



Punzone del Collaudatore:  
Stempel des Werkstoffprüfungsingenieur  
Inspection stamp/Prüfung de l'assesseur



Oggetto Prove: - Annealed Cold Drawn  
Prüfunggegenstand/Inspektionsthe Gegenstand

Tipo di Elaborazione: E+AOD  
Erzeugungsteilung/Erzeugungsteilung/Modus d'elaboration

Specifiche:  
Anforderungen / Requirements / Bedingungen

VS1 0 303 A,CF  
ASME SA320 2004 B8F 0  
ASTM A370 2007A  
QQ-S-764 B/2 303 A  
(0) SEC. II PTA 2004 EDITION ADD.2008  
(1) Chemical analysis only.

AMS 5640 U S30300 A  
ASTM A314 97 S30300  
ASTM A582 2005 S30300 A

AMS 5640 U TYPE1 A  
ASTM A320 2007A B8F (1)  
ML-S-852 B/1 303

0Chemical analysis only.

Qualità: T-303  
Werkstoff/Grade/Qualität

Marca: VPAU188Z VALPLUS  
Markenbezeichnung/Marken/Marken

Punzonatura: T-303  
Kerzennormung/Marking/Marking

Pos. nr. Pos. nr. Nr. de point	Oggetto Object Produit objet plan Description de produit	Dimensioni - In Abmessungen Dimension Dimensions	Tolleranza Toleranz Allowance Tolérance	Lunghezza - Ft Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot no. Lot n°
0060	Square	1,0000 x 1,0000	464-06B	13 / 13	245298		1.790	706701180

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind i. Anlage erfüllt  
The material has been furnished in accordance with the requirements  
Le matériau a été fourni conforme aux exigences

Controllo antisolfonanza: OK  
Verschmelzungstestung spezifiziert durch gelte  
Annealing testing conform: OK  
Contrôle sulfonage satisfaisant

Controllo visivo e dimensionale: soddisfa le esigenze?  
Sichtprüfung und Feinmessung ohne Beanstandung  
Visual inspection and dimensional inspection satisfactory  
Contrôle visuel et dimensionnel satisfaisant

TEST	PROVISTA/PROBEN Schnitten/Proben 133 1/16" x 1 1/16" x 1 1/16" 133 1/16" x 1 1/16" x 1 1/16" With 1/16" Thick Lap after 1000 mm	°F	Perit. Saggio Superf. Endurance %	Snervamento Zugversuch in 0,2% Rp 0,2% k.s.l.	Snervamento Zugversuch in 0,2% Rp 0,2% k.s.l.	Resistenza Zugversuch in 0,2% Rm k.s.l.	Allungamento Zugversuch in 0,2% E 4d %	Strizione Zugversuch in 0,2% RA %	Resistenza Zugversuch in 0,2% Rm k.s.l.	Durezza Härte HRC Dureté
	Valori richiesti 1 Anforderungen für die ersten Versuchsgegenstände	min max								140 255
A	12,5	68	L	80		102	37		50	242

Grain size for ASTM E112

6

1) Längsrichtung, 2) Querschnitt, 3) Querschnitt, 4) Querschnitt, 5) Querschnitt, 6) Querschnitt, 7) Querschnitt, 8) Querschnitt, 9) Querschnitt, 10) Querschnitt

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata / Heat Schmelze/Grade	min - max 0,150	1,00	1,50 2,00	7,00 10,00	0,50	1,00	8,00 10,00	-	-	0,100	0,25 0,35	0,40	-	-	-	-
245298	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %					
	0,053	0,47	1,79	17,24	0,38	0,71	8,13	0,10	0,029	0,28	0,01					

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940 °F for 1hr/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination  
The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1.5.4.3 by TÜV and LLOYD'S

Vicenza, 14/01/08  
V00006  
(Mod. MCER)

Il collaudatore di stabilimento / der Werkstoffprüfungsingenieur / Works inspector / L'agent d'usine

M. Rizzotto

Pagina - 1 di 1

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511  
50" x 1.250" X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-003

23Jul12

Signed by: Pg 1/2

**KAISER**  
**ALUMINUM**  
FABRICATED PRODUCTS

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: PEC-236648-4		CUSTOMER PART NUMBER: ALREC00139		PRODUCT DESCRIPTION: 0.500 X 1.250 SQ COR RECT BAR	
KAISER ORDER NUMBER: 612835	LINE ITEM: 004	SHIP DATE: 02/03/2012	KAISER LOT NUMBER: Z00248009	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 494.000 LB	QUANTITY: 56.000 PCS	B/L NUMBER: 602545	DIAM/DAF/THKNS: 0.500	WIDTH: 1.250	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00248009	0C01	1	45.9	43.1	15.5	RE 91	N/A	N/A
Z00248009	0C01	2	47.0	44.1	16.2	RE 92	N/A	N/A
Z00248009	0C01	3	46.5	43.6	17.1	RE 94	N/A	N/A
Z00248009	0C01	4	47.1	44.5	17.1	RE 91	N/A	N/A
Z00248009	0C01	5	46.5	43.8	16.5	RE 88	N/A	N/A
Z00248009	0C01	6	46.0	43.0	17.9	RE 94	N/A	N/A
Z00248009	0C01	7	45.6	42.3	15.9	RE 93	N/A	N/A
Z00248009	0001	8	46.2	43.3	16.1	RE 91	N/A	N/A
Z00248009	0001	9	46.5	43.7	17.9	RE 93	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101C84	.73	.37	.29	.08	.94	.10	.08	.03	.00	.00	.00	.01	.03

### Applicable Requirements:

ASTM-B221-08-STENCILED ASME-CP221 1993 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also  
conforms to T6-not applicable to other tempers)

### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

Plant Serial: 00028007

Kaiser Order Number: 612835

Line Item: 004

**THYSSENKRUPP MATERIALS NA****DART AEROSPACE**ALUMINUM FLAT BAR 6061-T6511  
50" x 1.250" X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.**Certificate of Mill Test Results**

BL PBC-777693-003

23Jul12

Signed by: \_\_\_\_\_

Pg 2/2

**KAISER**  
**ALUMINUM**  
FABRICATED PRODUCTSKAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048*Best in Class***CERTIFIED TEST REPORT**<http://Online.KaiserAluminum.com>**CERTIFICATION**

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality &amp; Technology Manager

*Alex Yeh*

Plant Serial: 00028007

Kaiser Order Number: 512835

Line Item: 004

Page 2 of 2



# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

1.00" x 4.00" X 144.0000"

PART NO.

PO/Ref 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by: \_\_\_\_\_

## Certificate of Mill Test Results

BL PEC-777693-006

23Jul12

Pg 1/1



SERVICE CENTER METALS

5850 Quality Way

Prince George, VA 23875

### CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152409	3

<b>BILL TO</b>	<b>MANIFEST NUMBER</b>	<b>DIE NUMBER</b>	<b>DATE OF SHIPMENT</b>	<b>CERTIFICATION</b>
ThyssenKrupp Materials NA	162248	RB0128	6/19/2012	ASTM-B221-12 Stencil Continuous
<b>SHIP TO</b>	<b>CUSTOMER PO</b>	<b>ALLOY / TEMPER</b>	<b>SALESPERSON</b>	<b>SPECIFICATION</b>
ThyssenKrupp Materials NA PEC	PEC-239753	6061-T6511	David Schroeder	AMS-QQA-200/8-07
<b>Quantity Certified</b>	<b>CUSTOMER PART NUMBER</b>	<b>DESCRIPTION</b>		
1,482 lbs 26 pcs	RB0128	SCRB 1.000x4.000		

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCA

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

#### Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201210303	06/12/12	50.2	46.9	14.9

#### Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others Each	Total	Melt Source:
0512135	6061	0.73	0.38	0.31	0.09	0.84	0.09	0.07	0.02	97.47	0.05	0.15	United States of America

Print Date: 6/19/2012

Cabrin J. Higgins, Director of Quality & Technical Services

Rev 5/23/11 - JNKS

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

1.50" x 2.00" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by: \_\_\_\_\_

## Certificate of Mill Test Results

BL PEC-777693-008

23Jul12

Pg 1/1



SERVICE CENTER-METALS

5850 Quality Way

Prince George, VA 23875

### CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152110	12

BILL TO

ThyssenKrupp Materials NA

SHIP TO

ThyssenKrupp Materials NA PEC

Quantity Certified 1,369 lbs 32 pcs

MANIFEST NUMBER

161536

CUSTOMER PO

PEC-239616

CUSTOMER PART NUMBER

RB0138

DIE NUMBER

RB0138

ALLOY / TEMPER

6061-T6511

DESCRIPTION

SCRB 1.500x2.000

DATE OF SHIPMENT

6/8/2012

SALESPERSON

David Schroeder

CERTIFICATION

ASTM-B221-12 StencilContinuous

SPECIFICATION

AMS-QQA-200/8-07

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCA extrusions are manufactured in the USA.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

#### Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
91	201209117	05/25/12	51.5	49.2	14.9
92	201209117	05/25/12	49.9	46.8	15.1
93	201209117	05/25/12	49.2	46.4	15.6
94	201209117	05/25/12	49.1	46.0	16.8
95	201209117	05/25/12	49.3	46.7	15.2
96	201209117	05/25/12	49.3	45.9	15.3

#### Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others		Melt Source:
											Each	Total	
031424	6061	0.77	0.38	0.35	0.11	0.91	0.09	0.06	0.02	97.31	0.05	0.15	United States of America
032224	6061	0.72	0.38	0.30	0.09	0.86	0.09	0.06	0.02	97.48	0.05	0.15	
032725	6061	0.74	0.36	0.32	0.10	0.84	0.09	0.08	0.02	97.45	0.05	0.15	

Print Date: 6/8/2012

Calvin J. Williams, Director of Quality & Technical Services

Rev. 8/23/11 - UMS

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6S11  
1.00" DIA X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-010

23Jul12

Signed by: \_\_\_\_\_ Pg 1/2

**KAISER**  
**ALUMINUM**  
FABRICATED PRODUCTS

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: PEC-239097-5		CUSTOMER PART NUMBER: C16246-2		PRODUCT DESCRIPTION: KAISERSELECT PRECISION ROD 1.000+/-0.004	
KAISER ORDER NUMBER: 620138	LINE ITEM: 005	SHIP DATE: 05/11/2012	KAISER LOT NUMBER: Z00216020	ALLOY: 6061	TEMPER: T6511B
WEIGHT SHIPPED: 2922.000 LB	QUANTITY: 264.000 PCS	BNL NUMBER: 603400	DIAM/DAF/THKNS: 1.000	WIDTH: 1.000	LENGTH: 12.000 FT
SHIP TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z0021602C	0C01	1	51.2	49.0	16.9	RE 94	N/A	N/A
Z0021602C	0C01	2	50.9	48.6	16.3	RE 93	N/A	N/A
Z0021602C	0C01	3	50.7	48.6	16.9	RE 93	N/A	N/A
Z0021602C	0C01	4	50.1	47.4	15.8	RE 93	N/A	N/A
Z0021602C	0C01	5	51.1	48.9	16.6	RE 94	N/A	N/A
Z0021602C	0C01	6	51.6	49.3	16.4	RE 94	N/A	N/A
Z0021602C	0C01	7	51.2	48.9	17.3	RE 95	N/A	N/A
Z0021602C	0C02	1	49.7	47.2	17.4	RE 94	N/A	N/A
Z0021602C	0C02	2	49.6	47.0	16.6	RE 95	N/A	N/A
Z0021602C	0C02	3	50.1	47.9	15.7	RE 94	N/A	N/A
Z0021602C	0C02	4	50.3	47.9	16.9	RE 94	N/A	N/A
Z0021602C	0C02	5	49.5	47.9	16.9	RE 93	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.03	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.30	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101538	.72	.32	.28	.09	.95	.09	.05	.03	.00	.00	.00	.01	.03

### Applicable Requirements:

PER ASTM-B221-08, STENCILED ASME-SB221 1998 SECT II PER AMS-QQ-A-200/8 UNS# A96061  
MEETS ALL SPECIFICATION REQUIREMENTS FOR 6061-T6S11/T6 ELEVATED MINIMUM MECHANICAL  
PROPERTIES AS FOLLOWS: UTS = 42.0 KSI MIN YIELD = 38.0 KSI MIN ELONGATION = 10.0% MIN

### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

Plant Serial: 00043535

Kaiser Order Number: 620138

Line Item: 005

**THYSSENKRUPP MATERIALS NA****DART AEROSPACE**

ALUMINUM ROUND BAR 6061-T6511

1.00" DIA X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

**Certificate of Mill Test Results**

BL.PHC-777693-010

23Jul12

Signed by: \_\_\_\_\_ Pg 2/2

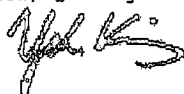
**KAISER**  
**ALUMINUM**  
FABRICATED PRODUCTS

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

**CERTIFIED TEST REPORT**<http://Online.KaiserAluminum.com>**CERTIFICATION**

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality &amp; Technology Manager



Plant Serial: 00043535

Kaiser Order Number: 620138

Line Item: 005

Page 2 of 2

## THYSSENKRUPP MATERIALS NA

## Certificate of Mill Test Results

DART AEROSPACE

ALUMINUM SHEET 6061 T6  
.1250 Nom X 48.0000" X 96.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

BL PEC-777693-013

23Jul12

Pg 1/2

Signed by: \_\_\_\_\_

Abnahmeprüfzeugnis 3.1 (EN 10204)  
Inspection certificate – mill certificate

Nr.: 85283529 06 / 9

Rev. 0

Seite / page: 1 von / of 2

Datum / date: 2012 04 11

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, NADCAP

Auftraggeber / customer: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD, ON	Bestell-Nr. / order no.:	PEC-237401
	Datum / date:	2012 03 05
Warenempfänger / consignee: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD, ON	Auftragsbest. Nr. / order confirm. no.:	638423
	Datum / date:	2012 03 06
Endkunde, Bestell-Nr. / Your cust., ord. no.:	Lieferschein-Nr. / delivery note:	85283529
	Datum / date:	2012 04 30
Akkreditiv-Nr. / letter of credit no.:		

Produkt/product	Bedingungen/terms
Form / form: Sheet Werkstoff / material: 6061 Zustand / temper: T6 Dim. / dim: [inch]: 0,125x48,00x96,00 Kundenartikel-Nr. / customer article no.:	Techn. Lieferbedingungen / techn. spec.: AMS-QQ-A-250/11, 08.1997 ASTM B 209 - 07 Material meets also the mech. properties of AMS 4027N, 07.2008, but not marked ANSI H35.2-2009 ASME SB 209, 2007
Sondervorschrift / special terms:	

AB-Pos. ord.-item.	BNr/Los/Teil/Los Lot/No./Part	Guss Nr. cast no.	Werkstoff material	Kollo packno.	Gewicht netto weight net	Stk. pcs.
04	30286/01/00	01/0049556/2	6061.1	6384230007	4003,527 lbs	73
04	30286/01/00	01/0049556/2	6061.1	6384230008	4001,323 lbs	73

## Chemische Zusammensetzung / chemical composition: [%] Gewichtsanteile / weight proportion (OES)

Guss Nr. / cast no.	AMAG designation	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti
01/0049556/2	6061.1 actual	0,08	0,43	0,26	0,12	0,93	0,18	0,01	0,05	0,05

## Zugversuch / Tensile test

BNr/Los Lot/No.	Zustand temper	Richtung direction	Rm [ksi]	Rp0.2 [ksi]	A2" [%]
30286/01	T6	LT	47,4	41,0	15
30286/01	T6	LT	47,1	40,6	14
30286/01	T6	LT	47,1	40,6	14
30286/01	T6	LT	47,1	40,8	14
30286/01	T6	LT	47,0	40,3	15
30286/01	T6	LT	47,1	40,5	15
30286/01	T6	LT	47,4	40,6	15
30286/01	T6	LT	47,9	41,0	15

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – [www.amag.at](http://www.amag.at)  
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – [www.amag.at](http://www.amag.at)

**THYSSENKRUPP MATERIALS NA****DART AEROSPACE**ALUMINUM SHEET 6061 T6  
.1250 Nom X 48.0000" X 96.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.**Certificate of Mill Test Results**

BL PEC-777693-013

23Jul12

Signed by: \_\_\_\_\_ Pg 2/2

**Abnahmeprüfzeugnis 3.1 (EN 10204)**  
**Inspection certificate – mill certificate**

Zertifiziert nach: certified to ISO 9001, ISO/TS 13549, EN/AS 9100 ISO 14001, NADCAP

Nr.: 85283529 06 / 9

Rev. 0

Seite / page: 2 von / of 2

Datum / date: 2012 04 11

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.  
We hereby certify that the material described above has been tested and complies with the terms of the order contract.

<b>Werkssachverständiger /</b> <b>factory specialist</b>	<b>E-Mail / e-mail</b>
Josef Klampfer	j.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.  
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – [www.amag.at](http://www.amag.at)  
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – [www.amag.at](http://www.amag.at)

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE  
STAINLESS STEEL SHEET 304-2B  
.1200 Nom X 48.0000" X 120.0000"  
PART NO.

PO/Ref 17463  
We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-002  
23Jul12  
Pg 1/1

Signed by: \_\_\_\_\_

### 产品质量证明书 MILL TEST CERTIFICATE

**DMSSC** 江苏大明金属制品有限公司  
JIANGSU DAMING METAL PRODUCTS CO., LTD.  
10000 DAMING METAL PRODUCTS CO., LTD.  
10000 DAMING METAL PRODUCTS CO., LTD.  
ADDRESS: NO. 1018, TIANHANG ROAD, WUXI, JIANGSU  
PROVINCE, CHINA  
TEL: 8104288857

订单号: 02199  
Model No.  
客户名称: GLOBAL STAINLESS STEEL INC.  
Order  
材料厂名: CONECONEE

品名: COLD ROLLED STAINLESS  
Commodity: STEEL SHEET, BLT EDGE

编号: M120302001  
Invoice No.  
发行日期: 2012-4-15  
Date

序号 No.	Product No.	炉号 Type	表面加工 Surface Finish	产品尺寸 Product Size			重量 NET Weight KG	标准 Specification	拉伸试验 Tensile Test			硬度 Hardness HV0.05	钢号 STEEL NO.	炉号 HEAT NO.	化学成分 Chemical Composition (%)								
				厚度 Thickness MM	宽度 Width MM	长度 Length MM			屈服强度 Rm0.2 Mpa	抗拉强度 Rm Mpa	延伸率 % A				C	Si	Mn	P	S	Ni	Cr	N	
1	P001003000	304	2B	0.5	1210	2430	910.04	ASTM A240	275	731	65	167	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
2	P001003001	304	2B	0.5	1210	3048	305.06	ASTM A240	275	731	65	167	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
3	P001715073	304	2B	0.5	1210	3048	305.06	ASTM A240	270	731	60	167	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
4	P001003219	304	2B	1.5	1210	2430	1813.74	ASTM A240	273	592	62	168	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
5	P001003220	304	2B	1.5	1210	3048	1813.74	ASTM A240	273	592	62	168	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
6	P001003221	304	2B	1.5	1210	3048	1813.74	ASTM A240	273	592	62	168	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
7	P00120553	304	2B	2.0	1210	3048	936.08	ASTM A240	263	785	58	173	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
8	P001004203	304	2B	3.0	1210	2430	1409.00	ASTM A240	261	683	61	175	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
9	P001004205	304	2B	3.0	1210	3048	1409.00	ASTM A240	261	683	61	175	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
10	P001004208	304	2B	3.0	1210	2430	1409.00	ASTM A240	261	683	61	175	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
11	P001705121	304	2B	2.5	1210	3048	1363.04	ASTM A240	267	714	55	174	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
12	P001003702	304	NO.4	1.5	1210	2430	1805.45	ASTM A240	267	654	58	166	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
13	P001003709	304	NO.4	1.5	1210	3048	1805.45	ASTM A240	267	654	58	166	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
14	P001003725	304	NO.4	2.0	1210	2430	1923.50	ASTM A240	315	647	63	83	KA11234070A10	C310555	0.0303	0.0500	1.0800	0.0300	0.0010	9.1	19.21	0.046	
15	P001705035	304	NO.4	2.5	1210	2430	1870.30	ASTM A240	267	714	55	174	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	
16	P001705037	304	NO.4	2.5	1210	2430	1870.30	ASTM A240	267	714	55	174	QWA0130C	SP25011	0.0510	0.0500	1.0620	0.0321	0.0057	9.02	19.26	/	

1. 尺寸公差: 见标准  
2. 表面: 2B

我们特此证明此材料符合订单和标准的要求。  
WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE ORDER AND SPECIFICATION.  
此证明仅供客户参考。  
江苏大明金属制品有限公司  
JIANGSU DAMING METAL PRODUCTS CO., LTD.

## Pg 1/1

RCV 023/11 - 1045



# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SQUARE BAR 6061-T6511  
1.250" X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-007

23Jul12

Signed by: \_\_\_\_\_

Pg 1/2

**KAISER**  
**ALUMINUM**  
FABRICATED PRODUCTS

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: PEC-240344-2		CUSTOMER PART NUMBER: ALSQ00100		PRODUCT DESCRIPTION: 1.250 SC SQ BAR	
KAISER ORDER NUMBER: 623482	LINE ITEM: 002	SHIP DATE: 07/06/2012	KAISER LOT NUMBER: Z00240017	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 1058.000 LB	QUANTITY: 48.000 PCS	B/L NUMBER: 603828	DIAM/DAF/THKNS: 1.250	WIDTH: 1.250	LENGTH: 12.000 FT
SHIP TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00240017	0001	1	52.8	50.5	16.6	RE 93	N/A	N/A
Z00240017	0001	2	51.6	49.0	17.9	RE 93	N/A	N/A
Z00240017	0001	3	51.9	49.4	17.5	RE 94	N/A	N/A
Z00240017	0001	4	52.9	50.7	16.2	RE 93	N/A	N/A
Z00240017	0001	5	52.5	50.1	17.9	RE 94	N/A	N/A
Z00240017	0001	6	51.4	49.0	17.7	RE 94	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101758	.67	.26	.24	.09	.92	.09	.02	.03	.00	.00	.00	.01	.03

### Applicable Requirements:

ASTM-B221-12 STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 (2007) UNS#A96061  
(T6511 also conforms to T6-not applicable to other tempers)

### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

Plant Serial: C0050003

Kaiser Order Number: 623482

Line Item: 002

Page 1 of 2

## THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SQUARE BAR 6061-T6511

1.250" X 144.0000"

PART NO.

PO/Ref 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PBC-777693-007

23Jul12

Signed by: \_\_\_\_\_

Pg 2/2

**KAISER**  
**ALUMINUM**  
FABRICATED PRODUCTS

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

*Best in Class*

## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

## CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Calvin Latting, Quality & Technology Manager

*Calvin Latting*

Plant Serial: 00050303  
Kaiser Order Number: 623482  
Line Item: 002

Page 2 of 2

18/24

2012-Jul-21 03:20 PM ThyssenKrupp Materials NA Conc 9056691787

# THYSSENKRUPP MATERIALS NA

## DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511  
3.50" DIA X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
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resulting from tests made in approved labs.

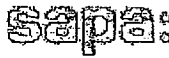
## Certificate of Mill Test Results

BL PEC-777693-011

23Jul12

Pg 1/2

Signed by: \_\_\_\_\_



Sapa Industrial Extrusions  
53 POTTSVILLE STREET  
CRESSONA, PA  
17929-0187

Sapa Extrusions Inc., a Subsidiary of Sapa AB

### Invoice To Customer

THYSSENKRUPP MATERIALS NA INC  
2821 LANGSTAFF ROAD  
ATTN: ACCOUNT PAYABLE  
--  
CONCORD, ON - L4K 5C6

### Ship To Customer

THYSSENKRUPP MATERIALS NA INC  
2821 LANGSTAFF ROAD  
--  
CONCORD, ON - L4K 5C6

## Certified Inspection Report

Sales Order Number	Line No.	Customer P/O	Cert Number	Page
1100483665	1	PEC-240110-001	SAPA591092	1 of 2
			Cert Creation Date	Cert Print Date
			25-JUN-12	25-JUN-12

Quantity Shipped	Date Shipped	Item Description	Specification
1900 LB	25-JUN-12	ACC-U-LINE Extruded ACC-U-ROD 3.500 DIA +/-0.12	ASTM B221 REV 12 AMS-CQ-A-20X/8 REV ASM B221 REV 00
B/L	Item No.	SECT 500328 144.000 IN LN FIN M-MILL	UNSWA95061 REV SARL454 RGV
339465	G03305626	W/F 11.314 F 1 CS 3.5 6061/T6511H	Meets 6061-T6511H, 6061-T6511 REV
Delivery Id	Item No. Rev	Marking CONTINUOUS;	
4330967			
Customer Part No.			
3.5ER+			

Applicable Specifications, Revisions and Exceptions

COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on this certified inspection report. Remainder is Aluminum.

### Legal Statement

We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition and had the mechanical properties shown on the face of this certification. Also, note that mercury is not a normal contaminant in aluminum alloys and neither it nor any of its compounds are used in the manufacture of our product. This certification is not to be reproduced in partial form without prior written approval of our Quality Assurance Dept.

### Signature And Title

*William T. Martin, III*  
William Martin III  
Tech/Quality Manager

25-JUN-12

### Quantities per Lot / Packages

Packaging Number	Lot Number	Quantity	UOM	Weight
				Gross Net
G12-PKG1711554	21112151	7	PCS	956 950
G12-PKG1711554	21112151	--	--	-- --
G12-PKG1711554	21112151	--	--	-- --
G12-PKG1711558	21112151	7	PCS	956 950

### Composition Limits

# THYSSENKRUPP MATERIALS NA

**DART AEROSPACE**

ALUMINUM ROUND BAR 6061-T6511

3.50" DIA X 144.0000"

PART NO.

PO/Rel 17463

 We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by:

## Certificate of Mill Test Results

BL PEC-777693-011

23Jul12

Pg 2/2

**sapa**

 Sapa Industrial Extrusions  
33 POTTSVILLE STREET

 CRESSONA, PA  
17929-0187

### Certified Inspection Report

Sales Order Number

1100483665

Line No.

1

Customer T/O

PEC-240110-001

Cert Number

SAPAS91092

Page

Page 2 of 2

Cert Creation Date

25-JUN-12

Cert Print Date

25-JUN-12

Alloy	Si		Fe		Cu		Mn		Mg		Zn		Al	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
6061	0.40	0.80	---	0.70	0.15	0.40	---	0.15	0.80	1.20	0.04	0.35	---	0.25
Alloy	Ti		H		Pb		Others Each		Others Total					
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max				
6061	---	0.15	---	0.05	---	0.05	---	0.05	---	0.15				

#### Composition Results

Heat / Cast	Si	Fe	Cu	Mn	Mg	Cr	Zn	Al	Other	Other Total
4028239	0.69	0.30	0.31	0.10	0.87	0.13	0.04	0.02	---	---

#### Mechanical Property - Test Limits

Test Type				UTS - L		YYS - L		EL 4D-Long	
DOM				RSI		RSI		PCT	
Port 1				--		--		--	
Test Temp	Lot Number	Port 1	MIN Value	MAX Value	MIN Value	MAX Value	MIN Value	MAX Value	
76511H	21112151	2	51.4	53.3	48.3	50.3	12.5	15.0	

#### Cert Notes

Products manufactured with a T6511 temper also meet T6 temper requirements.

Yield strength has been determined by the 0.2% offset method.

All Mill Finish Alloys produced at Sapa Extrusions comply with 0.4% Maximum Lead per RoHS, with the exception of 6262 alloy.

In accordance with EN 10204 Inspection Certificate Type 3.1

Melted in the USA or Other Qualified Countries as Defined by DFARS 225.872.1

Made in USA

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511  
.750" X 1.50" X 144.0000"  
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-005

23Jul12

Signed by: \_\_\_\_\_

Pg 1/2

**KAISER**  
**ALUMINUM**  
FABRICATED PRODUCTS

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

### CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: PEC-239300-1		CUSTOMER PART NUMBER: ALREC00806		PRODUCT DESCRIPTION: .750 X 1.500 SC RECT BAR	
KAISER ORDER NUMBER: 621011	LINE ITEM: 001	SHIP DATE: 05/25/2012	KAISER LOT NUMBER: HK079 712	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 508.000 LB	QUANTITY: 32.000 PCS	BL NUMBER: 603528	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
HK079 712	0001	0001	43.0	41.6	19.4	RE 97	N/A	N/A
HK079 712	0001	0002	43.1	38.1	20.5	RE 97	N/A	N/A
HK079 712	0001	0003	43.0	41.6	20.8	RE 97	N/A	N/A
HK079 712	0001	0004	46.7	39.3	20.3	RE 97	N/A	N/A
HK079 712	0001	0005	47.4	43.3	18.0	RE 97	N/A	N/A
HK079 712	0001	0006	47.8	40.0	18.0	RE 97	N/A	N/A
HK079 712	0001	0007	43.0	42.5	18.6	RE 97	N/A	N/A
HK079 712	0001	0008	48.0	41.9	18.3	RE 97	N/A	N/A
HK079 712	0001	0009	46.9	41.3	19.4	RE 97	N/A	N/A
HK079 712	0001	0010	47.9	40.1	19.8	RE 97	N/A	N/A
HK079 712	0001	0011	46.9	38.6	15.9	RE 97	N/A	N/A
HK079 712	0001	0012	48.1	44.4	19.7	RE 96	N/A	N/A
HK079 712	0001	0013	48.0	42.2	21.7	RE 96	N/A	N/A
HK079 712	0001	0014	47.0	42.1	18.7	RE 96	N/A	N/A
HK079 712	0001	0015	47.5	39.4	17.6	RE 96	N/A	N/A
HK079 712	0001	0016	48.4	40.4	15.1	RE 96	N/A	N/A
HK079 712	0001	0017	48.0	41.9	19.5	RE 95	N/A	N/A
HK079 712	0001	0018	48.1	43.1	17.6	RE 95	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
A32603	.68	.32	.24	.05	.98	.11	.06	.01	.00	.00	.00	.00	.01
A32602	.69	.32	.23	.05	.95	.10	.04	.02	.00	.00	.00	.00	.00
A32601	.70	.30	.24	.06	.97	.11	.05	.02	.00	.00	.00	.00	.00

### Applicable Requirements:

Plant Serial: 00045426

Kaiser Order Number: 621011

Line Item: 001

## THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.750" X 1.50" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-777693-005

23Jul12

Signed by: Pg 2/2

**KAISER**  
**ALUMINUM**  
FABRICATED PRODUCTS

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also  
conforms to T6-not applicable to other tempers)

## Miscellaneous Notes

MANUFACTURED IN USA (COMMERCE,CA) MELTED IN USA

## CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been  
inspected and tested and found in conformance with applicable specifications forming a part of the  
description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on  
Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality &amp; Technology Manager

## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

Plant Serial: 00045426

Kaiser Order Number: 621011

Line Item: 001

Page 2 of 2

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

2.00" x 2.50" X 144.0000"

PART NO. OFFERING\*\*\*\*\*

PO/Rel 17463

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furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by: \_\_\_\_\_

## Certificate of Mill Test Results

BL PBC-777693-009

23Jul12

Pg 1/1



### MILL TEST REPORT

TEL: (416)745-4444 FAX: (416)745-0925 1-800-668-7210  
411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4  
<http://www.extrudex.com>

BILL TO

THYSSENKRUPP MATERIALS, NA

SHIP TO

THYSSENKRUPP MATERIALS, NA

SO DESCRIPTION

2"x2.5" FB

Cert Code:

1

0.02

DIE NUMBER

S 23922

DATE OF SHIPMENT

7/16/2012

EXTRUDEX ORDER NO.

MANIFEST NO.

146935 - 4

270266

CUSTOMER PO

PEC-239512

ALLOY TEMPER

6061 T6511

SALESMAN

FORBES DODWELL

MADE IN CANADA

CUSTOMER PART NUMBER

PART DESCRIPTION

CERTIFICATION

MILL TEST ASTM B221

### Mechanical Properties

Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness	Conductivity
A.11	6061	Jul/13/12	45.2	42.4	13.30	89.3, 89.0, 89.8	

### Chemical Composition

Cast Number	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
A.11 C7331164 6061	0.61	0.18	0.19	0.01	0.88	0.06	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

David Natale  
Quality Control Manager

1 - CUSTOMER COPY

MILL TEST REPORT

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 6061 T6  
.0810 Nom X 48.0000" X 144.0000"  
PART NO.

PO/Rel 17463

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## Certificate of Mill Test Results

BL PEC-777693-012

23Jul12

Signed by:

Pg 1/2



### Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate - mill certificate

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, ENAS 9103, ISO 14001, NADCAP

Nr.: 85289222 02 / 7

Rev. 0

Seite / page: 1 von / of 2

Datum / date: 2012 02 15

Auftraggeber / customer: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 506 CONCORD, ON	Bestell-Nr. / order no.: PEC-236262 Datum / date: 2012 01 19
Warenempfänger / consignee: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 506 CONCORD, ON	Auftragsbest. Nr. / order confirm. no.: 636296 Datum / date: 2012 01 20
Endkunde, Bestell-Nr. / Your cust., ord. no.:	Lieferschein Nr. / delivery note: 85289222 Datum / date: 2012 02 29
	Akkreditiv Nr. / letter of credit no.:

Produkt/product Form / form: Sheet Werkstoff / material: 6061 Zustand / temper: T6 Dim. / dim: (inch): 0,080x48,00x144,00 Kundenartikel-Nr / customer article no.:	Bedingungen/terms: Techn. Lieferbedingungen / techn. spec.: AMS-QQ-A-250/11, 08.1997 ASTM B 209 - 07 Material meets also the mech. properties of AMS 4027N. 07.2008, but not marked ANSI H35.2-2009 ASME SB 209, 2007  Sondervorschrift / special terms:
---	---

AB-Pos. ord./item.	BNr/Los/Tell/Los Lot/No./Part	Guss Nr. cast no.	Werkstoff material	Kollo: packno.	Gewicht netto weight net	Stk. pcs.
02	25872/01/00	01/0047294/1	6061.1	6362960002	4029,982 lbs	77

### Chemische Zusammensetzung / chemical composition: [%] Gewichtsanteile / weight proportion (OES)

Guss Nr. / cast no.	AMAG designation	Si	Fe	Cu	Mn	Pb	Cr	Ni	Zn	Ti
01/0047294/1	6061.1									
	actual	0,65	0,48	0,23	0,11	0,01	0,18	0,01	0,04	0,06

### Zugversuch / Tensile test

BNr/Los Lot/No.	Zustand temper	Richtung direction	Rm [ksi]	Rp0.2 [ksi]	A2" [%]
25872/01	T6	LT	47,0	39,2	16
25872/01	T6	LT	47,1	39,2	15
25872/01	T6	LT	47,3	39,3	15
25872/01	T6	LT	47,0	39,2	16
25872/01	T6	LT	46,8	39,0	16
25872/01	T6	LT	46,7	38,9	15
25872/01	T6	LT	46,7	38,9	15
25872/01	T6	LT	46,8	39,0	16
25872/01	T6	LT	46,6	38,7	15

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich - [www.amag.at](http://www.amag.at)  
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria - [www.amag.at](http://www.amag.at)



## THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 6061 T6  
.0810 Nom X 48.0000" X 144.0000"  
PART NO.

PO/Rel 17463

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## Certificate of Mill Test Results

BL PBC-777693-012

23Jul12

Signed by: \_\_\_\_\_ Pg 2/2

Abnahmeprüfzeugnis 3.1 (EN 10204)  
Inspection certificate – mill certificate

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, ENAS 9100, ISO 14001, NADCAP

Nr.: 85289222 02 / 7

Rev. 0

Seite / page: 2 von / of 2

Datum / date: 2012 02 15

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.  
We hereby certify that the material described above has been tested and complies with the terms of the order contract.

Werkssachverständiger /  
factory specialist

Josef Klampfer

E-Mail / e-mail

j.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.  
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – [www.amag.at](http://www.amag.at)  
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – [www.amag.at](http://www.amag.at)